# DARF®N<sub>MLCC</sub>

### CONTENT (MLCC)

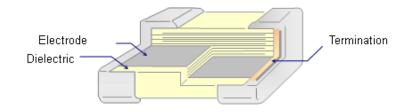
E STANDARD NUMBER	
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CLASS I: TEMPERATURE COMPENSATING TYPE	
Class II: High Dielectric Constant Type	
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X7R Series	
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### **E Standard Number**

E3	1.0					2.2								4.7									
E6		1.0	1.5				2.2				3.	.3			4.	7		6.8					
E12	1.0	1	.2	1.	.5	1.	8	2.	.2	2.	.7	3.	3	3.	.9	4.	7	5.	6	6.	.8	8.	2
E24	1.0 1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.3	3.6	3.9	4.3	4.7	5.1	5.6	6.2	6.8	7.5	8.2	9.1



#### **Structure**



### **Ordering Code**

### <u>C 1005 NP0 101 J G T S △</u>

PRODUCT CODE —

C = MLCC

SIZE in mm (EIA CODE, in inch) -

0402(01005) 0603(0201) 1005 (0402) 1608 (0603) 2012 (0805) 3216 (1206) 3225(1210) 4520 (1808) 4532 (1812)

T. C. -

NP0:  $0 \pm 30$ ppm/°C -55°C to +125°C X5R:  $\pm 15\%$  -55°C to +85°C

X7R: ±15% X7S:±22% X7T: +22%/-33% X7U: +22%/-56% -55℃ to +125℃

X6S: ±22% -55°C to +105°C

**CAPACITANCE CODE-**

Expressed in pico-farads and identified by a three-digit number. First two digits represent significant figures.

Last digit specifies the number of zeros.

(Use 9 for 1.0 through 9.9pF; Use 8 for 0.20 through 0.99pF)

Examples:									
Code	Cap (pF)								
478	0.47								
229	2.2								
101	100								
102	1000								

#### TOLERANCE CODE -

A:  $\pm 0.05 pF$  B:  $\pm 0.1 pF$  C:  $\pm 0.25 pF$  D:  $\pm 0.5 pF$  F:  $\pm 1\%$  G:  $\pm 2\%$ 

J: ±5% K: ±10% M: ±20%

**VOLTAGE CODE-**

B: 4V C: 6.3V D: 10V E: 16V F: 25V N: 35V G: 50V H: 100V J: 200V K: 250V L: 500V M: 630V P: 1KV Q: 2KV R: 3KV S: 4KV

#### PACKAGING CODE-

T: Paper tape reel Ø180mm (7")

P: Embossed tape reel Ø180mm (7")

N: Paper tape reel Ø250mm (40")

N: Paper tape reel Ø250mm (10")

D: Embossed tape reel Ø250mm (10")

A: Paper tape reel Ø330mm (13")

E: Embossed tape reel Ø330mm (13")

W: Special Packing

**Application Code** 

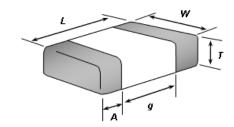
S: Standard Q: High Q/Low ESR F: Microwave A: Automotive Infotainment with AEC-Q200

#### Thickness Code

Code	Thick (mm)	Code	Thick(mm)	Code	Thick (mm)	Code	Thick (mm)
(blank)	Standard Thick	M	0.70	G	1.25	S	1.90
Z	0.20	D	0.80	Н	1.50		
Α	0.30	E	0.85	L	1.60		
Q	0.45	I	0.95	N	2.00		
В	0.50	J	1.00	Р	2.50		
С	0.60	F	1.15	R	3.20		

## **General Purpose**

### ■ External Dimensions



T	YPE		Dimensi	on (mm)		
Size (EIA Size)	Kind	L (Length)	W (Width)	T (Max.)	g (Min)	A (Min/Max)
C0603	Standard	$0.6 \pm 0.03$	$0.30 \pm 0.03$	0.33		0.10 / 0.20
(0201)	Special (1)	$0.6 \pm 0.05$	$0.30 \pm 0.05$	0.35	0.15	0.1070.20
(0201)	Special (2)	$0.6 \pm 0.09$	$0.30 \pm 0.09$	0.39		0.10 / 0.25
	Standard	$1.0 \pm 0.05$	$0.50 \pm 0.05$	0.55		
C1005	Special (1)	$1.0 \pm 0.10$	$0.50 \pm 0.10$	0.60	0.30	0.15 / 0.35
(0402)	Special (2)	1.0 ± 0.15	0.50 ± 0.15	0.65	0.30	0.15 / 0.35
	Special (3)	1.0 ± 0.20	0.50 ± 0.20	0.70		
	Standard	1.6 ± 0.10	$0.80 \pm 0.10$	0.90		
C1608	Special (1)	1.6 ± 0.15	$0.80 \pm 0.15$	0.95	0.50	0.25 / 0.65
(0603)	Special (2)	$1.6 \pm 0.20$	$0.80 \pm 0.20$	1.00	0.50	0.23 / 0.03
	Special (3)	$1.6 \pm 0.25$	$0.80 \pm 0.25$	1.05		
C2012	Standard	$2.0 \pm 0.15$	1.25 ± 0.15	1.45	0.70	0.25 / 0.75
(0805)	Special (1)	$2.0 \pm 0.20$	1.25 ± 0.20	1.45	0.70	0.23 / 0.73
00040	Standard	$3.2 \pm 0.15$	1.60 ±0.15	1.80		
C3216 (1206)	Special (1)	$3.2 \pm 0.20$	1.60 ±0.20	1.90	1.50	0.25 / 0.75
(1200)	Special (2)	$3.2 \pm 0.30$	1.60 ±0.30	1.90		
C3225	Standard	$3.2 \pm 0.30$	$2.50 \pm 0.20$	2.80	1.50	0.3 / 0.00
(1210)	Special (1)	$3.2 \pm 0.40$	$2.50 \pm 0.30$	2.80	1.50	0.3 / 0.90

For special parts, please see the "Part Number & Characteristic" for detail specification.



## Class I: Temperature Compensating Type

#### ■ Feature

- 1. Ultra-stable
- 2. Tight tolerance available
- 3. Low ESR (Frequency is within 800MHz)
- 4. Good frequency performance
- 5. No aging of capacitance
- 6. RoHS compliant
- 7. Halogen Free

#### Application

- 1. LC and RC tuned circuit
- 2. Filtering
- 3. Timing

#### ■ Part Number & Characteristic

• C0603NP0\_S Series (EIA0201)

				Capaci	tance			Toleran	ce(mm)		<u> </u>
RV	DARFON P/N	DARFON P/N 2	Measuring Condition	Value	Unit	Available Tolerance	Thick.	L/W	Thick.	DF (max.)	Standard Packing
			• • • • • • • • • • • • • • • • • • • •				` '			, ,	racking
	C0603NP0208 GTS	C0603NP0208 GT	1V, 1MHz	0.20	pF -	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0308_GTS	C0603NP0308_GT	1V, 1MHz	0.30	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0408 GTS	C0603NP0408 GT	1V, 1MHz	0.40	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0508 GTS	C0603NP0508 GT	1V, 1MHz	0.50	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0608 GTS	C0603NP0608 GT	1V, 1MHz	0.60	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0708 GTS	C0603NP0708 GT	1V, 1MHz	0.70	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0758 GTS	C0603NP0758 GT	1V, 1MHz	0.75	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0808 GTS	C0603NP0808 GT	1V, 1MHz	0.80	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0908 GTS	C0603NP0908 GT	1V, 1MHz 1V, 1MHz	0.90	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0109_GTS C0603NP0119_GTS	C0603NP0109 GT	1V, 1MHz	1.0	pF pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03 ±0.03	0.24%	
			1V, 1MHz		pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0129GTS C0603NP0139GTS	C0603NP0129 GT	1V, 1MHz	1.2	_	±0.25pF,±0.1pF	0.30			0.24%	
	C0603NP0139_GTS C0603NP0159_GTS	C0603NP0139 GT C0603NP0159 GT	1V, 1MHz	1.5	pF pF	±0.25pF,±0.1pF ±0.25pF,±0.1pF	0.30	±0.03	±0.03 ±0.03	0.23%	
			1V, 1MHz	1.6	pF		0.30	±0.03	±0.03	_	
	C0603NP0169GTS C0603NP0189GTS	C0603NP0169GT C0603NP0189GT	1V, 1MHz	1.8	pF	±0.25pF,±0.1pF ±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0209 GTS		1V, 1MHz	2.0	pF	±0.25pF,±0.1pF ±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0209_GTS		1V, 1MHz	2.0	рF		0.30		±0.03	0.23%	
	C0603NP0229GTS	C0603NP0229 GT C0603NP0249 GT	1V, 1MHz	2.4	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0249_GTS	C0603NP0249 GT	1V, 1MHz	2.7	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.22%	
	C0603NP0279GTS		1V, 1MHz	3.0	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.22%	
			1V, 1MHz		pF	±0.25pF,±0.1pF					
		C0603NP0339 GT	1V, 1MHz	3.3	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0359 GTS	C0603NP0359 GT	1V, 1MHz	3.5	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03 ±0.03	0.21%	
	C0603NP0409 GTS	C0603NP0409 GT	1V, 1MHz	4.0	pF	±0.25pF,±0.1pF ±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0409_GTS	C0603NP0439 GT	1V, 1MHz	4.3	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
50V	C0603NP0479 GTS	C0603NP0479 GT	1V, 1MHz	4.7	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	Paper,15Kpcs
30 V	C0603NP0509 GTS	C0603NP0509 GT	1V, 1MHz	5.0	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	г арсі, готерса
	C0603NP0519 GTS	C0603NP0519 GT	1V, 1MHz	5.1	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	
	C0603NP0569 GTS	C0603NP0569 GT	1V. 1MHz	5.6	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	
	C0603NP0609_GTS	C0603NP0609 GT	1V, 1MHz	6.0	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	
	C0603NP0629 GTS	C0603NP0629 GT	1V, 1MHz	6.2	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0689 GTS	C0603NP0689 GT	1V, 1MHz	6.8	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0709 GTS	C0603NP0709 GT	1V, 1MHz	7.0	рF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0759 GTS	C0603NP0759 GT	1V, 1MHz	7.5	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.13%	
	C0603NP0809 GTS	C0603NP0809 GT	1V, 1MHz	8.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.18%	
	C0603NP0829 GTS	C0603NP0829 GT	1V, 1MHz	8.2	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.18%	
	C0603NP0909 GTS	C0603NP0909 GT	1V, 1MHz	9.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.17%	
	C0603NP0100 GTS	C0603NP0100 GT	1V, 1MHz	10	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.17%	
	C0603NP0120 GTS	C0603NP0120 GT	1V, 1MHz	12	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.16%	
	C0603NP0150 GTS	C0603NP0150 GT	1V, 1MHz	15	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.14%	
	C0603NP0180 GTS	C0603NP0180 GT	1V, 1MHz	18	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.13%	
	C0603NP0200 GTS	C0603NP0200 GT	1V, 1MHz	20	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.13%	
	C0603NP0220 GTS	C0603NP0220 GT	1V, 1MHz	22	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.12%	
	C0603NP0270 GTS	C0603NP0270 GT	1V, 1MHz	27	рF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.12%	
	C0603NP0300JGTS	C0603NP0300JGT	1V, 1MHz	30	pF	±5%	0.30	±0.03	±0.03	0.10%	
	C0603NP0330 GTS	C0603NP0330 GT	1V, 1MHz	33	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0390 GTS	C0603NP0390 GT	1V, 1MHz	39	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0470 GTS	C0603NP0470 GT	1V, 1MHz	47	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0560 GTS	C0603NP0560 GT	1V, 1MHz	56	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0680 GTS	C0603NP0680 GT	1V. 1MHz	68	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0820 GTS	C0603NP0820 GT	1V, 1MHz	82	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0101 GTS	C0603NP0101 GT	1V, 1MHz	100	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	

<sup>□</sup> Tolerance Code: A=±0.05 pF, B=±0.1pF, C=±0.25pF ,D=±0.5pF, F=±1%, G=±2%, J=±5%; Special tolerance on the request.

D)/	DARFON DAL	DADEON BALO	Measuring	Capaci	tance	A	Thick.	Toleran	ce(mm)	DF	Standard
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing
	C0603NP0208_FTS	C0603NP0208_FT	1V, 1MHz	0.20	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0308 FTS	C0603NP0308 FT	1V, 1MHz	0.30	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0408_FTS	C0603NP0408 FT	1V, 1MHz	0.40	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.25%	
	C0603NP0508 FTS	C0603NP0508 FT	1V, 1MHz	0.50	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0608 FTS	C0603NP0608_FT	1V, 1MHz	0.60	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0708 FTS	C0603NP0708 FT	1V, 1MHz	0.70	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0758 FTS	C0603NP0758 FT	1V, 1MHz	0.75	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0808 FTS	C0603NP0808_FT	1V, 1MHz	0.80	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0908 FTS	C0603NP0908_FT	1V, 1MHz	0.90	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0109 FTS	C0603NP0109_FT	1V, 1MHz	1.0	pF	±0.25pF,±0.1pF,±0.05pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0129_FTS	C0603NP0129_FT	1V, 1MHz	1.2	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.24%	
	C0603NP0139_FTS	C0603NP0139_FT	1V, 1MHz	1.3	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0159_FTS	C0603NP0159_FT	1V, 1MHz	1.5	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0169_FTS	C0603NP0169_FT	1V, 1MHz	1.6	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0179 FTS	C0603NP0179 FT	1V, 1MHz	1.7	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0189 FTS	C0603NP0189_FT	1V, 1MHz	1.8	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0209 FTS	C0603NP0209_FT	1V, 1MHz	2.0	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0229 FTS	C0603NP0229 FT	1V, 1MHz	2.2	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.23%	
	C0603NP0279_FTS	C0603NP0279_FT	1V, 1MHz	2.7	рF		0.30	±0.03	±0.03	0.23%	
						±0.25pF,±0.1pF	_			0.22%	
			1V, 1MHz	3.0	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03		
	C0603NP0339_FTS	C0603NP0339_FT	1V, 1MHz	3.3	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0359_FTS	C0603NP0359_FT	1V, 1MHz	3.5	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0399_FTS	C0603NP0399_FT	1V, 1MHz	3.9	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0409_FTS	C0603NP0409_FT	1V, 1MHz	4.0	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0439 FTS	C0603NP0439_FT	1V, 1MHz	4.3	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.21%	
	C0603NP0479_FTS	C0603NP0479_FT	1V, 1MHz	4.7	pF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	
25V	C0603NP0509_FTS	C0603NP0509_FT	1V, 1MHz	5.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	Paper,15Kpcs
	C0603NP0519_FTS	C0603NP0519_FT	1V, 1MHz	5.1	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	' ' '
	C0603NP0569_FTS	C0603NP0569_FT	1V, 1MHz	5.6	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.20%	
	C0603NP0609_FTS	C0603NP0609_FT	1V, 1MHz	6.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0629_FTS	C0603NP0629_FT	1V, 1MHz	6.2	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0689_FTS	C0603NP0689_FT	1V, 1MHz	6.8	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0709_FTS	C0603NP0709_FT	1V, 1MHz	7.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.19%	
	C0603NP0759_FTS	C0603NP0759_FT	1V, 1MHz	7.5	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.18%	
	C0603NP0809_FTS	C0603NP0809_FT	1V, 1MHz	8.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.18%	
	C0603NP0829_FTS	C0603NP0829_FT	1V, 1MHz	8.2	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.18%	
	C0603NP0909_FTS	C0603NP0909_FT	1V, 1MHz	9.0	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.17%	
	C0603NP0919_FTS	C0603NP0919_FT	1V, 1MHz	9.1	pF	±0.5pF,±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.17%	
	C0603NP0100_FTS	C0603NP0100_FT	1V, 1MHz	10	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.17%	
	C0603NP0120_FTS	C0603NP0120_FT	1V, 1MHz	12	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.16%	
	C0603NP0150_FTS	C0603NP0150_FT	1V, 1MHz	15	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.14%	
	C0603NP0180_FTS	C0603NP0180_FT	1V, 1MHz	18	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.13%	
	C0603NP0200 FTS	C0603NP0200 FT	1V, 1MHz	20	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.13%	
	C0603NP0220 FTS	C0603NP0220 FT	1V, 1MHz	22	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.12%	
	C0603NP0240 FTS	C0603NP0240 FT	1V, 1MHz	24	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.11%	
	C0603NP0270_FTS	C0603NP0270_FT	1V, 1MHz	27	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.11%	
	C0603NP0300JFTS	C0603NP0300JFT	1V, 1MHz	30	pF	±5%	0.30	±0.03	±0.03	0.10%	
	C0603NP0330 FTS	C0603NP0330 FT	1V, 1MHz	33	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0390_FTS	C0603NP0390_FT	1V, 1MHz	39	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0470 FTS	C0603NP0470_FT	1V, 1MHz	47	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0560 FTS	C0603NP0560_FT	1V, 1MHz	56	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0680 FTS	C0603NP0680_FT	1V, 1MHz	68	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0820 FTS	C0603NP0820_FT	1V, 1MHz	82	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
	C0603NP0101 FTS	C0603NP0101_FT	1V, 1MHz	100	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.10%	
<b>—</b>	C0603NP0279 ETS	C0603NP0279_ET	1V, 1MHz	2.7	рF	±0.25pF,±0.1pF	0.30	±0.03	±0.03	0.10%	
16V	C0603NP0330 ETS	C0603NP0330_ET	1V, 1MHz	33	pF	±5%,±2%,±1%	0.30	±0.03	±0.03	0.22%	Paper,15Kpcs
	COORDINE 0330 E 13	COOOSINF USSU_E I	IV, HVI⊓Z	აა	рΓ	エン /o,エと /o,± l /o	0.30	±∪.U3	±∪.∪3	0.10%	

## • C1005NP0\_S Series (EIA0402)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capacit		Available Tolerance	Thick.	Toleran		DF	Standard
			Condition	Value			(mm)	L/W	Thick.	(max.)	Packing
	C1005NP0208 GTS	C1005NP0208 GT	1V, 1MHz	0.20	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.25%	
	C1005NP0308 GTS	C1005NP0308_GT	1V, 1MHz	0.30	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.25%	
	C1005NP0408 GTS	C1005NP0408_GT	1V, 1MHz	0.40	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.25%	
	C1005NP0508 GTS	C1005NP0508_GT	1V, 1MHz	0.50	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0608 GTS	C1005NP0608 GT	1V, 1MHz	0.60	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0688 GTS	C1005NP0688 GT	1V, 1MHz	0.68	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0708 GTS	C1005NP0708 GT	1V, 1MHz	0.70	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0808 GTS	C1005NP0808 GT	1V, 1MHz	0.80	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0828_GTS	C1005NP0828_GT	1V, 1MHz	0.82	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0908 GTS	C1005NP0908 GT	1V, 1MHz	0.90	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0109_GTS	C1005NP0109_GT	1V, 1MHz	1.0	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0129_GTS	C1005NP0129_GT	1V, 1MHz	1.2	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.24%	
	C1005NP0139 GTS	C1005NP0139 GT	1V, 1MHz	1.3	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.23%	
	C1005NP0159_GTS	C1005NP0159_GT	1V, 1MHz	1.5	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.23%	
	C1005NP0189_GTS	C1005NP0189_GT	1V, 1MHz	1.8	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.23%	
	C1005NP0209_GTS	C1005NP0209_GT	1V, 1MHz	2.0	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.23%	
	C1005NP0229 GTS	C1005NP0229 GT	1V, 1MHz	2.2	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.23%	
	C1005NP0249 GTS	C1005NP0249 GT	1V, 1MHz	2.4	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.22%	
	C1005NP0259 GTS	C1005NP0259 GT	1V, 1MHz	2.5	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.22%	
	C1005NP0279 GTS	C1005NP0279 GT	1V, 1MHz	2.7	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.22%	
	C1005NP0309_GTS	C1005NP0309 GT	1V, 1MHz	3.0	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.22%	
	C1005NP0339 GTS	C1005NP0339 GT	1V, 1MHz	3.3	pF	±0.5pF,±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.21%	
	C1005NP0369 GTS	C1005NP0369_GT	1V, 1MHz	3.6	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.21%	
	C1005NP0399 GTS	C1005NP0399 GT	1V, 1MHz	3.9	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.21%	
	C1005NP0409 GTS	C1005NP0409_GT	1V, 1MHz	4.0	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.21%	
	C1005NP0439 GTS	C1005NP0439 GT	1V, 1MHz	4.3	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.21%	
	C1005NP0479_GTS	C1005NP0479_GT	1V, 1MHz	4.7	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.20%	
	C1005NP0509_GTS	C1005NP0509_GT	1V, 1MHz	5.0	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.20%	
	C1005NP0519_GTS	C1005NP0519_GT	1V, 1MHz	5.1	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.20%	
	C1005NP0569_GTS	C1005NP0569_GT	1V, 1MHz	5.6	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.20%	
	C1005NP0609_GTS	C1005NP0609 GT	1V, 1MHz	6.0	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.19%	
	C1005NP0629 GTS	C1005NP0629 GT	1V, 1MHz	6.2	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.19%	
	C1005NP0689_GTS	C1005NP0689 GT	1V, 1MHz	6.8	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.19%	
50V	C1005NP0709_GTS	C1005NP0709_GT	1V, 1MHz	7.0	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.19%	Paper, 10Kpcs
	C1005NP0759 GTS	C1005NP0759 GT	1V, 1MHz	7.5	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.18%	
	C1005NP0809_GTS	C1005NP0809 GT	1V, 1MHz	8.0	pF_	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.18%	
	C1005NP0829 GTS	C1005NP0829 GT	1V, 1MHz	8.2	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.18%	
	C1005NP0909 GTS	C1005NP0909 GT	1V, 1MHz	9.0	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.17%	
	C1005NP0919 GTS	C1005NP0919 GT	1V, 1MHz	9.1	pF	±0.5pF,±0.25pF,±0.1pF	0.50	±0.05	±0.05	0.17%	
	C1005NP0100 GTS	C1005NP0100 GT	1V, 1MHz	10	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.17%	
	C1005NP0110 GTS	C1005NP0110 GT	1V, 1MHz	11	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.16%	
	C1005NP0120 GTS	C1005NP0120 GT	1V, 1MHz	12	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.16%	
	C1005NP0150 GTS	C1005NP0150 GT	1V, 1MHz	15	pF pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.14%	
	C1005NP0160 GTS	C1005NP0160 GT	1V, 1MHz 1V, 1MHz	16	pF pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.14%	
	C1005NP0180 GTS C1005NP0200 GTS	C1005NP0180_GT C1005NP0200_GT	1V, 1MHz	18 20	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.13%	
			1V, 1MHz	22	pF	±5%,±2%,±1%	0.50	±0.05	±0.05 ±0.05	0.13%	
	C1005NP0220 GTS C1005NP0240 GTS	C1005NP0220 GT C1005NP0240 GT	1V, 1MHz	24	pF	±5%,±2%,±1% ±5%,±2%,±1%	0.50	±0.05	±0.05	0.12%	
	C1005NP0240_GTS		1V. 1MHz	27	ηF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.11%	
	C1005NP0270_GTS		1V, 1MHz	30	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.11%	
	C1005NP0300_GTS		1V, 1MHz	33	рF	±10%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0360 GTS	C1005NP0360 GT	1V, 1MHz	36	рF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0390_GTS		1V, 1MHz	39	рF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0390_GTS	C1005NP0430 GT	1V, 1MHz		_	±5%,±2%,±1%	0.50				
	C1005NP0430 GTS	C1005NP0470 GT	1V, 1MHz	43 47	pF pF	±5%,±2%,±1%	0.50	±0.05 ±0.05	±0.05 ±0.05	0.10%	
	C1005NP0470_GTS	C1005NP0510 GT	1V, 1MHz	51	рF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0510_GTS	C1005NP0560 GT	1V, 1MHz		_	±5%,±2%,±1%	0.50		±0.05	0.10%	
	C1005NP0560_GTS			56	pF			±0.05		0.10%	
	C1005NP0620GTS	C1005NP0620 GT C1005NP0680 GT	1V, 1MHz 1V, 1MHz	62 68	pF pF	±5%,±2%,±1% ±5%,±2%,±1%	0.50	±0.05	±0.05 ±0.05	0.10%	
	C1005NP0680GTS	C1005NP0680GT	1V, 1MHz	68 75	pF pF	±5%,±2%,±1% ±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0750GTS			75 82	_	±5%,±2%,±1% ±5%,±2%,±1%					
		C1005NP0820 GT	1V, 1MHz	82	pF		0.50	±0.05	±0.05	0.10%	
	C1005NP0910 GTS		1V, 1MHz	91	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0101 GTS C1005NP0121 GTS	C1005NP0101 GT	1V, 1MHz	100	pF	±5%,±2%,±1%	0.50	±0.05	±0.05 ±0.05	0.10%	
			1V, 1MHz	120	pF pF	±5%,±2%,±1%	_	±0.05		0.10%	
	C1005NP0151 GTS	C1005NP0151 GT	1V, 1MHz	150	pF	±5%,±2%,±1%	0.50	±0.05	±0.05 ±0.05	0.10%	
	C1005NP0181 GTS	C1005NP0181 GT	1V, 1MHz	180	pF	±5%,±2%,±1%	_	±0.05		0.10%	
	C1005NP0201 GTS	C1005NP0201 GT	1V, 1MHz	200	pF nE	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0221 GTS	C1005NP0221 GT	1V, 1MHz	220	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available Tolerance	Thick.	Toleran	ce(mm)	DF	Standard
ΚV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing
	C1005NP0271 GTS	C1005NP0271 GT	1V, 1MHz	270	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0301 GTS	C1005NP0301 GT	1V, 1MHz	300	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	
	C1005NP0331 GTS	C1005NP0331 GT	1V, 1MHz	330	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	
	C1005NP0391 GTS	C1005NP0391 GT	1V, 1MHz	390	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
50V	C1005NP0471 GTS	C1005NP0471 GT	1V, 1MHz	470	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	Paper, 10Kpcs
	C1005NP0561 GTS	C1005NP0561 GT	1V, 1MHz	560	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	
	C1005NP0681 GTS	C1005NP0681 GT	1V, 1MHz	680	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	
	C1005NP0821 GTS	C1005NP0821 GT	1V, 1MHz	820	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	
	C1005NP0102 GTS	C1005NP0102 GT	1V, 1MHz	1.0	nF	±5%,±2%	0.50	±0.05	±0.05	0.10%	
	C1005NP0208_FTS	C1005NP0208_FT	1V, 1MHz	0.2	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.25%	
	C1005NP0308 FTS	C1005NP0308_FT	1V, 1MHz	0.3	pF	±0.25pF,±0.1pF,±0.05pF	0.50	±0.05	±0.05	0.25%	
25V	C1005NP0120 FTS	C1005NP0120_FT	1V, 1MHz	12	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.16%	Paper, 10Kpcs
	C1005NP0221JFTS	C1005NP0221JFT	1V, 1MHz	220	pF	±5%	0.50	±0.05	±0.05	0.10%	
	C1005NP0102JFTS	C1005NP0102JFT	1V, 1MHz	1.0	nF	±5%	0.50	±0.05	±0.05	0.10%	
16V	C1005NP0470_ETS	C1005NP0470_ET	1V, 1MHz	47	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.10%	Danar 10Knas
100	C1005NP0331_ETS	C1005NP0331_ET	1V, 1MHz	330	pF	±5%,±2%	0.50	±0.05	±0.05	0.10%	Paper, 10Kpcs
10V	C1005NP0220 DTS	C1005NP0220 DT	1V, 1MHz	22	pF	±5%,±2%,±1%	0.50	±0.05	±0.05	0.12%	Paper, 10Kpcs

#### C1608NP0 S Series (EIA0603)

	C TOUGINFU_	S Series (El	A0603)								
RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci		Available Tolerance	Thick.	Toleran		DF	Standard
			Condition	Value	Unit		(mm)	L/W	Thick.	(max.)	Packing
	C1608NP0308 GTS	C1608NP0308 GT	1V, 1MHz	0.30	pF	±0.25pF,±0.1pF,±0.05pF	0.80	±0.10	±0.10	0.25%	
	C1608NP0508 GTS	C1608NP0508 GT	1V, 1MHz	0.50	pF	±0.25pF,±0.1pF,±0.05pF	0.80	±0.10	±0.10	0.24%	
	C1608NP0758 GTS	C1608NP0758 GT	1V, 1MHz	0.75	pF	±0.25pF,±0.1pF,±0.05pF	0.80	±0.10	±0.10	0.24%	
	C1608NP0109 GTS	C1608NP0109_GT	1V, 1MHz	1.0	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.24%	
	C1608NP0129_GTS	C1608NP0129_GT	1V, 1MHz	1.2	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.24%	
	C1608NP0159_GTS	C1608NP0159_GT	1V, 1MHz	1.5	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.23%	
	C1608NP0189 GTS	C1608NP0189_GT	1V, 1MHz	1.8	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.23%	
	C1608NP0209 GTS	C1608NP0209 GT	1V, 1MHz	2.0	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.23%	
	C1608NP0229 GTS	C1608NP0229 GT	1V, 1MHz	2.2	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.23%	
	C1608NP0249 GTS	C1608NP0249 GT	1V, 1MHz	2.4	pF -	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.22%	
	C1608NP0279 GTS	C1608NP0279 GT	1V, 1MHz	2.7	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.22%	
	C1608NP0309 GTS	C1608NP0309 GT	1V, 1MHz	3.0	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.22%	
	C1608NP0339 GTS	C1608NP0339 GT	1V, 1MHz	3.3	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.21%	
	C1608NP0399 GTS	C1608NP0399 GT	1V, 1MHz	3.9	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.21%	
	C1608NP0409 GTS	C1608NP0409 GT	1V, 1MHz	4.0	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.21%	
	C1608NP0479 GTS	C1608NP0479 GT	1V, 1MHz	4.7	pF	±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.20%	
	C1608NP0509 GTS	C1608NP0509 GT	1V, 1MHz	5.0	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.20%	
	C1608NP0569 GTS	C1608NP0569 GT	1V, 1MHz	5.6	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.20%	
	C1608NP0609 GTS	C1608NP0609 GT	1V, 1MHz	6.0	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.19%	
	C1608NP0629 GTS	C1608NP0629 GT	1V, 1MHz	6.2	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.19%	
	C1608NP0689 GTS	C1608NP0689 GT	1V, 1MHz	6.8	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.19%	
	C1608NP0709 GTS	C1608NP0709 GT	1V, 1MHz	7.0	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.19%	
	C1608NP0829 GTS	C1608NP0829 GT	1V, 1MHz	8.2	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.18%	
	C1608NP0909 GTS	C1608NP0909 GT	1V, 1MHz	9.0	pF	±0.5pF,±0.25pF,±0.1pF	0.80	±0.10	±0.10	0.17%	
50V	C1608NP0100 GTS	C1608NP0100 GT	1V, 1MHz	10	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.17%	D 41/
50V	C1608NP0110 GTS C1608NP0120 GTS	C1608NP0110 GT C1608NP0120 GT	1V, 1MHz 1V, 1MHz	11 12	pF pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.16%	Paper, 4Kpcs
	C1608NP0150_GTS	C1608NP0150 GT	1V, 1MHz	15	pF	±5%,±2%,±1% ±5%,±2%,±1%	0.80	±0.10	±0.10 ±0.10	0.16%	
	C1608NP0180 GTS		1V, 1MHz	_	pF		0.80		±0.10		
	C1608NP0200 GTS	C1608NP0180_GT C1608NP0200_GT	1V, 1MHz	18 20	pF	±5%,±2%,±1% ±5%,±2%,±1%	0.80	±0.10	±0.10	0.13%	
	C1608NP0220 GTS	C1608NP0220 GT	1V, 1MHz	22	pF		0.80	±0.10	±0.10	0.13%	
	C1608NP0240 GTS	C1608NP0240 GT	1V, 1MHz	24	рF	±5%,±2%,±1% ±5%,±2%,±1%	0.80	±0.10	±0.10	0.12%	
	C1608NP0270 GTS	C1608NP0270 GT	1V, 1MHz	27	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.11%	
	C1608NP0300 GTS	C1608NP0300 GT	1V, 1MHz	30	рF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.11%	
	C1608NP0330 GTS	C1608NP0330 GT	1V, 1MHz	33	рF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0360 GTS	C1608NP0360 GT	1V, 1MHz	36	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0390 GTS	C1608NP0390 GT	1V, 1MHz	39	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0430 GTS	C1608NP0430 GT	1V, 1MHz	43	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0470 GTS	C1608NP0470 GT	1V, 1MHz	47	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0560 GTS	C1608NP0560 GT	1V, 1MHz	56	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0620 GTS	C1608NP0620 GT	1V, 1MHz	62	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0680 GTS	C1608NP0680 GT	1V, 1MHz	68	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0750 GTS	C1608NP0750_GT	1V, 1MHz	75	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0820 GTS	C1608NP0820 GT	1V, 1MHz	82	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0910 GTS	C1608NP0910 GT	1V, 1MHz	91	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0101 GTS	C1608NP0101 GT	1V, 1MHz	100	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0121 GTS	C1608NP0121 GT	1V, 1MHz	120	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0151 GTS	C1608NP0151 GT	1V, 1MHz	150	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
	C1608NP0181 GTS	C1608NP0181 GT	1V, 1MHz	180	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
1	C1608NP0201 GTS	C1608NP0201 GT	1V, 1MHz	200	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
1	C1608NP0221 GTS	C1608NP0221 GT	1V, 1MHz	220	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.10%	
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RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available Tolerance	Thick.	Toleran	ce(mm)	DF	Standard
ΚV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Folerance	(mm)	L/W	Thick.	(max.)	Packing
	C1608NP0271 GTS	C1608NP0271 GT	1V, 1MHz	270	pF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0331 GTS	C1608NP0331 GT	1V, 1MHz	330	рF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0391 GTS	C1608NP0391 GT	1V, 1MHz	390	рF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0471 GTS	C1608NP0471 GT	1V, 1MHz	470	рF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0561 GTS	C1608NP0561 GT	1V, 1MHz	560	рF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0681 GTS	C1608NP0681 GT	1V, 1MHz	680	pF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
	C1608NP0821 GTS	C1608NP0821 GT	1V, 1MHz	820	рF	±5%,±2%	0.80	±0.10	±0.10	0.10%	
50V	C1608NP0102 GTS	C1608NP0102 GT	1V, 1MHz	1.0	nF	±5%,±2%	0.80	±0.10	±0.10	0.10%	Paper, 4Kpcs
	C1608NP0122JGTS	C1608NP0122JGT	1V, 1kHz	1.2	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0152JGTS	C1608NP0152JGT	1V, 1kHz	1.5	nF	±5%	0.80		+0.15/-0.10	0.10%	
	C1608NP0182JGTS	C1608NP0182JGT	1V, 1kHz	1.8	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0222JGTS	C1608NP0222JGT	1V, 1kHz	2.2	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0272JGTS	C1608NP0272JGT	1V, 1kHz	2.7	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0332JGTS	C1608NP0332JGT	1V, 1kHz	3.3	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0103JGTS	C1608NP0103JGT	1V, 1kHz	10	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0152JFTS	C1608NP0152JFT	1V, 1kHz	1.5	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
25V	C1608NP0682JFTS	C1608NP0682JFT	1V, 1kHz	6.8	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	Paper, 4Kpcs
	C1608NP0103JFTS	C1608NP0103JFT	1V, 1kHz	10	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0180_ETS	C1608NP0180_ET	1V, 1MHz	18	pF	±5%,±2%,±1%	0.80	±0.10	±0.10	0.13%	
	C1608NP0300JETS	C1608NP0300JET	1V, 1MHz	30	pF	±5%	0.80	±0.10	±0.10	0.10%	
16V	C1608NP0152JETS	C1608NP0152JET	1V, 1kHz	1.5	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	Paper, 4Kpcs
	C1608NP0272JETS	C1608NP0272JET	1V, 1kHz	2.7	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	
	C1608NP0332JETS	C1608NP0332JET	1V, 1kHz	3.3	nF	±5%	0.80	+0.15/-0.10	+0.15/-0.10	0.10%	

## • C2012NP0\_S Series (EIA0805)

			Measuring	Capaci	tance		Thick.	Toleran	ce(mm)	DF	Standard
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	LW	Thick.	(max.)	Packing
	C2012NP0100 GTS	C2012NP0100 GT	1V. 1MHz	10	pF	±5%,±2%	0.60	±0.15	±0.15	0.17%	
	C2012NP0120 GTS	C2012NP0120 GT	1V, 1MHz	12	pF	±5%,±2%	0.60	±0.15	±0.15	0.16%	
	C2012NP0150 GTS	C2012NP0150 GT	1V. 1MHz	15	pF	±5%.±2%	0.60	±0.15	±0.15	0.14%	
	C2012NP0180 GTS	C2012NP0180 GT	1V. 1MHz	18	pF	±5%,±2%	0.60	±0.15	±0.15	0.13%	
	C2012NP0200 GTS	C2012NP0200 GT	1V, 1MHz	20	pF	±5%,±2%	0.60	±0.15	±0.15	0.13%	
	C2012NP0220 GTS	C2012NP0220 GT	1V. 1MHz	22	pF	±5%,±2%	0.60	±0.15	±0.15	0.13%	
	C2012NP0270 GTS	C2012NP0270 GT	1V. 1MHz	27	pF	±5%,±2%	0.60	±0.15	±0.15	0.12%	
	C2012NP0300 GTS	C2012NP0300 GT	1V, 1MHz	30	рF	±5%,±2%	0.60	±0.15	±0.15	0.11%	
	C2012NP0300_GTS	C2012NP0300_GT	1V, IMHz	33	pF	±5%,±2% ±5%.±2%	0.60	±0.15	±0.15	0.10%	
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	C2012NP0360 GTS	C2012NP0360 GT	1V, 1MHz	36	pF	±5%,±2%	0.60	±0.15	±0.15	0.10%	
	C2012NP0470 GTS	C2012NP0470 GT	1V, 1MHz	47	pF	±5%,±2%	0.60	±0.15	±0.15	0.10%	
	C2012NP0680 GTS	C2012NP0680 GT	1V, 1MHz	68	pF	±5%,±2%	0.60	±0.15	±0.15	0.10%	
	C2012NP0820 GTS	C2012NP0820 GT	1V, 1MHz	82	pF	±5%,±2%	0.60	±0.15	±0.15	0.10%	
	C2012NP0101 GTS	C2012NP0101 GT	1V, 1MHz	100	pF	±5%,±2%	0.60	±0.15	±0.15	0.10%	
	C2012NP0121JGTS	C2012NP0121JGT	1V, 1MHz	120	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0151JGTS	C2012NP0151JGT	1V, 1MHz	150	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0201JGTS	C2012NP0201JGT	1V, 1MHz	200	pF	±5%	0.60	±0.15	±0.15	0.10%	Paper, 4Kpcs
	C2012NP0221JGTS	C2012NP0221JGT	1V, 1MHz	220	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0271JGTS	C2012NP0271JGT	1V, 1MHz	270	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0331JGTS	C2012NP0331JGT	1V, 1MHz	330	pF	±5%	0.60	±0.15	±0.15	0.10%	
50V	C2012NP0391JGTS	C2012NP0391JGT	1V, 1MHz	390	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0471JGTS	C2012NP0471JGT	1V, 1MHz	470	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0561JGTS	C2012NP0561JGT	1V, 1MHz	560	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0681JGTS	C2012NP0681JGT	1V, 1MHz	680	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0821JGTS	C2012NP0821JGT	1V, 1MHz	820	pF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0102JGTS	C2012NP0102JGT	1V, 1MHz	1.0	nF	±5%	0.60	±0.15	±0.15	0.10%	
	C2012NP0122JGTS	C2012NP0122JGT	1V, 1kHz	1.2	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0152JGTS	C2012NP0152JGT	1V, 1kHz	1.5	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0182JGTS	C2012NP0182JGT	1V, 1kHz	1.8	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0222JGTS	C2012NP0222JGT	1V, 1kHz	2.2	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0272JGTS	C2012NP0272JGT	1V, 1kHz	2.7	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0332JGTS	C2012NP0332JGT	1V, 1kHz	3.3	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0392JGTS	C2012NP0392JGT	1V, 1kHz	3.9	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0472JGTS	C2012NP0472JGT	1V, 1kHz	4.7	nF	±5%	0.85	±0.15	±0.15	0.10%	
	C2012NP0272JGPS	C2012NP0272JGP	1V, 1kHz	2.7	nF	±5%	1.25	±0.15	±0.20	0.10%	
	C2012NP0332JGPS	C2012NP0332JGP	1V, 1kHz	3.3	nF	±5%	1.25	±0.15	±0.20	0.10%	
	C2012NP0392JGPS	C2012NP0392JGP	1V, 1kHz	3.9	nF	±5%	1.25	±0.15	±0.20	0.10%	Fach area   OK
	C2012NP0472JGPS	C2012NP0472JGP	1V, 1kHz	4.7	nF	±5%	1.25	±0.15	±0.20	0.10%	Embossed, 3Kpcs
	C2012NP0562JGPS	C2012NP0562JGP	1V, 1kHz	5.6	nF	±5%	1.25	±0.15	±0.20	0.10%	
	C2012NP0682JGPS	C2012NP0682JGP	1V, 1kHz	6.8	nF	±5%	1.25	±0.15	±0.20	0.10%	
	C2012NP0822JGPS	C2012NP0822JGP	1V, 1kHz	8.2	nF	±5%	1.25	±0.15	±0.20	0.10%	D 417
	C2012NP0103JGTS	C2012NP0103JGT	1V, 1kHz	10	nF	±5%	0.85	±0.15	±0.10	0.10%	Paper, 4Kpcs
40) (	C2012NP0103JGPS	C2012NP0103JGP	1V, 1kHz	10	nF	±5%	1.25	±0.15	±0.20	0.10%	Emobssed,3Kpcs
16V	C2012NP0270_ETS	C2012NP0270 GT	1V, 1MHz	27	pF	±5%,±2%	0.60	±0.15	±0.15	0.11%	Paper, 4Kpcs

<sup>□</sup> Tolerance Code: F=±1%, G=±2%, J=±5%; Special tolerance on the request.

## • C3216NP0\_S Series (EIA1206)

RV	DADEON DAI	DARFON P/N 2	Measuring	Capaci	tance	Assailable Telegrane	Thick.	Toleran	ce(mm)	DF	Standard
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing
	C3216NP0822JGPS	C3216NP0822JGP	1V, 1kHz	8.2	nF	±5%	1.25	±0.15	±0.20	0.10%	Embossed, 3Kpcs
	C3216NP0103JGPS	C3216NP0103JGP	1V, 1kHz	10	nF	±5%	1.25	±0.15	±0.20	0.10%	Embosseu, anpos
	C3216NP0123JGPS	C3216NP0123JGP	1V, 1kHz	12	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0153JGPS	C3216NP0153JGP	1V, 1kHz	15	nF	±5%	1.60	±0.30	±0.30	0.10%	
50V	C3216NP0183JGPS	C3216NP0183JGP	1V, 1kHz	18	nF	±5%	1.60	±0.30	±0.30	0.10%	
30 V	C3216NP0223JGPS	C3216NP0223JGP	1V, 1kHz	22	nF	±5%	1.60	±0.30	±0.30	0.10%	Embossed, 2Kpcs
	C3216NP0273JGPS	C3216NP0273JGP	1V, 1kHz	27	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0333JGPS	C3216NP0333JGP	1V, 1kHz	33	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0393JGPS	C3216NP0393JGP	1V, 1kHz	39	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0104JGPS	C3216NP0104JGP	1V, 1kHz	100	nF	±5%	1.60	±0.30	±0.30	0.10%	Embossed, 2Kpcs
	C3216NP0123JEPS	C3216NP0123JEP	1V, 1kHz	12	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0153JEPS	C3216NP0153JEP	1V, 1kHz	15	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0183JEPS	C3216NP0183JEP	1V, 1kHz	18	nF	±5%	1.60	±0.30	±0.30	0.10%	
16V	C3216NP0223JEPS	C3216NP0223JEP	1V, 1kHz	22	nF	±5%	1.60	±0.30	±0.30	0.10%	Embossed, 2Kpcs
	C3216NP0273JEPS	C3216NP0273JEP	1V, 1kHz	27	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0333JEPS	C3216NP0333JEP	1V, 1kHz	33	nF	±5%	1.60	±0.30	±0.30	0.10%	
	C3216NP0393JEPS	C3216NP0393JEP	1V. 1kHz	39	nF	±5%	1.60	±0.30	±0.30	0.10%	

 $<sup>\ \</sup>square$  Tolerance Code: F=±1%, G=±2%, J=±5%; Special tolerance on the request.



## Class II: High Dielectric Constant Type

#### Feature

- 1. High volumetric efficiency
- 2. High insulation resistance
- 3. RoHS compliant
- 4. Halogen Free

### Application

- 1. Blocking
- 2. Coupling
- 3. Timing
- 4. Bypassing
- 5. Frequency discriminating
- 6. Flittering

#### ■ Part Number & Characteristic

- X5R Series
- C0603X5R Series(EIA0201)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Tolerand	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
50V	C0603X5R102 GTS	C0603X5R102 GT	1V , 1kHz	1.0	nF	±10%, ±20%	0.30	± 0.03	± 0.03	5.0%	Paper, 15Kpcs	(1)
	C0603X5R151KFTS	C0603X5R151KFT	1V , 1kHz	150	рF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X5R102 FTS	C0603X5R102□FT	1V , 1kHz	1.0	nF	±10%, ±20%	0.30	± 0.03	± 0.03	5.0%		(1)
	C0603X5R103 FTS	C0603X5R103□FT	1V , 1kHz	10	nF	±10%, ±20%	0.30	± 0.03	± 0.03	5.0%		(II)*
25V	C0603X5R103_F13	C0603X5R103_FT	1V , 1kHz	22	nF	±10%, ±20%	0.30		1	7.5%	Paper, 15Kpcs	(II)*
	_		-					± 0.03	± 0.03			
	C0603X5R104_FTS	C0603X5R104_FT	1V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R474MFTS	C0603X5R474MFT	1V , 1kHz	470	nF	±20%	0.30	± 0.09	± 0.09	10.0%		(II)*
	C0603X5R103_ETS	C0603X5R103_ET	1V , 1kHz	10	nF nF	±10%, ±20%	0.30	± 0.03	± 0.03	5.0%		(II)
	C0603X5R223_ETS	C0603X5R223_ET	1V , 1kHz	22		±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)*
16V	C0603X5R473_ETS	C0603X5R473_ET	1V , 1kHz	47	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%	Paper, 15Kpcs	(II)
	C0603X5R104_ETS	C0603X5R104_ET	1V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R224_ETS	C0603X5R224_ET	1V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R105METS	C0603X5R105MET	0.5V , 1kHz	1.0	uF	±20%	0.30	±0.09	±0.09	12.5%		(II)*
	C0603X5R222 DTS	C0603X5R222 DT	1V , 1kHz	2.2	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R332_DTS	C0603X5R332_DT	1V , 1kHz	3.3	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R472 DTS	C0603X5R472 DT	1V , 1kHz	4.7	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R562_DTS	C0603X5R562_DT	1V , 1kHz	5.6	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R682_DTS	C0603X5R682_DT	1V , 1kHz	6.8	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R822 DTS	C0603X5R822 DT	1V , 1kHz	8.2	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R103_DTS	C0603X5R103 DT	1V , 1kHz	10	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(l)
	C0603X5R153_DTS	C0603X5R153_DT	1V , 1kHz	15	nF	±10%, ±20%	0.30	± 0.03	± 0.03	7.5%		(II)
10V	C0603X5R223 DTS	C0603X5R223_DT	1V , 1kHz	22	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%	Paper, 15Kpcs	(II)
	C0603X5R333 DTS	C0603X5R333 DT	1V , 1kHz	33	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%	. аро., тотрос	(II)
	C0603X5R473_DTS	C0603X5R473_DT	1V , 1kHz	47	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R563_DTS	C0603X5R563_DT	1V , 1kHz	56	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R683_DTS	C0603X5R683 DT	1V , 1kHz	68	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R823 DTS	C0603X5R823 DT	1V , 1kHz	82	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R104_DTS	C0603X5R104_DT	0.5V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R224 DTS	C0603X5R224_DT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)*
	C0603X5R474 DTS	C0603X5R474_DT	0.5V , 1kHz	470	nF	±10%, ±20%	0.30	± 0.03	± 0.03	12.5%		(II)*
	C0603X5R105MDTS	C0603X5R105MDT	0.5V , 1kHz	1.0	uF	±20%	0.30	±0.09	±0.09	12.5%		(II)*
	C0603X5R222 CTS	C0603X5R222 CT	1V, 1kHz	2.2	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R332_CTS	C0603X5R332_CT	1V , 1kHz	3.3	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R472 CTS	C0603X5R472 CT	1V, 1kHz	4.7	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(I)
	C0603X5R562_CTS	C0603X5R562□CT	1V , 1kHz	5.6	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R682_CTS	C0603X5R682_CT	1V, 1kHz	6.8	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R822_CTS	C0603X5R822_CT	1V , 1kHz	8.2	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R103_CTS	C0603X5R103_CT	1V , 1kHz	10	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(l)
	C0603X5R223 CTS	C0603X5R223 CT	1V , 1kHz	22	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R333 CTS	C0603X5R333 CT	1V , 1kHz	33	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
6.3V	C0603X5R473 CTS	C0603X5R473 CT	1V , 1kHz	47	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%	Paper, 15Kpcs	(II)
	C0603X5R563 CTS	C0603X5R563 CT	1V , 1kHz	56	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R683 CTS	C0603X5R683 CT	1V , 1kHz	68	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R823 CTS	C0603X5R823 CT	1V , 1kHz	82	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R104 CTS	C0603X5R104 CT	0.5V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)
	C0603X5R224 CTS	C0603X5R224 CT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)*
	C0603X5R334 CTS	C0603X5R334 CT	0.5V , 1kHz	330	nF	±10%, ±20%	0.30	± 0.03	± 0.03	10.0%		(II)*
	C0603X5R474 CTS	C0603X5R474 CT	0.5V , 1kHz	470	nF	±10%, ±20%	0.30	± 0.03	± 0.03	12.5%		(II)*
	C0603X5R105 CTS	C0603X5R105_CT	1V , 1kHz	1.0	uF	±10%, ±20%	0.30	±0.05	±0.05	12.5%		(II)*
	C0603X5R225MCTS	C0603X5R225MCT	0.5V , 1kHz	2.2	uF	±20%	0.30	±0.09	±0.09	20.0%		(II)*
	C0603X5R224 BTS	C0603X5R224 BT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%		(II)
	C0603X5R474_BTS	C0603X5R474_BT	0.5V , 1kHz	470	nF	±10%, ±20%	0.30	± 0.03	± 0.03	12.5%		(II)*
4V	C0603X5R474_BTS	C0603X5R474_BT	0.5V , 1kHz	1.0	uF	±10%, ±20%	0.30	±0.05	±0.05	10.0%	Paper, 15Kpcs	(II)*
	C0603X5R105_BTS	C0603X5R105_B1	0.5V , 1kHz	2.2	ur uF	±10%, ±20% ±20%	0.30	±0.05	±0.05	20.0%		(II)*
	C10003A3RZZ3IVID13	CUUUJAJRZZJIVIB I	U.SV, IKMZ	۷.۷	uГ	±2U%	0.30	±0.09	±0.09	20.0%		(11)

### • C1005X5R Series (EIA0402)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Tolerand	e(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1005X5R103KGTS	C1005X5R103KGT	1V , 1kHz	10	nF	±10%	0.50	±0.05	±0.05	5.0%		(I)
50V	C1005X5R473KGTS	C1005X5R473KGT	1V , 1kHz	47	nF	±10%	0.50	±0.05	±0.05	5.0%	Paper, 10Kpcs	(I)
001	C1005X5R104 GTS	C1005X5R104_GT	1V , 1kHz	100	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%	. apo., poo	(II)
	C1005X5R105KGTS	C1005X5R105KGT	1V , 1kHz	1	uF	±10%	0.50	±0.20	±0.20	10.0%		(II)
35V	C1005X5R105_NTS	C1005X5R105_NT	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	±0.10	10.0%	Paper, 10Kpcs	(II)*
	C1005X5R225 NTS C1005X5R103KFTS	C1005X5R225 NT C1005X5R103KFT	1V , 1kHz 1V , 1kHz	2.2 10	uF nF	±10%, ±20% ±10%	0.50 0.50	±0.20 ±0.05	±0.20 ±0.05	10.0% 5.0%		(II)* (I)
	C1005X5R103KFTS	C1005X5R103KFT	1V , 1kHz	22	nF	±10%	0.50	±0.05	±0.05	5.0%		(I)
	C1005X5R473KFTS	C1005X5R473KFT	1V , 1kHz	47	nF	±10%	0.50	±0.05	±0.05	5.0%		(1)
25V	C1005X5R683KFTS	C1005X5R683KFT	1V , 1kHz	68	nF	±10%	0.50	±0.05	±0.05	5.0%	Papar 10Kpgs	(1)
251	C1005X5R104_FTS	C1005X5R104_FT	1V , 1kHz	100	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%	Paper, 10Kpcs	(l)
	C1005X5R224_FTS	C1005X5R224_FT	1V , 1kHz	220	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R105_FTS	C1005X5R105_FT	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	±0.10	12.5%		(II)*
	C1005X5R225 FTS	C1005X5R225 FT	1V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.20	±0.20	10.0%		(II)
	C1005X5R153_ETS C1005X5R223_ETS	C1005X5R153_ET C1005X5R223_ET	1V , 1kHz 1V , 1kHz	15 22	nF nF	±10%, ±20% ±10%, ±20%	0.50 0.50	±0.05 ±0.05	±0.05 ±0.05	5.0% 5.0%		(l) (l)
	C1005X5R333 ETS	C1005X5R333 ET	1V , 1kHz	33	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%		(I)
	C1005X5R473 ETS	C1005X5R473_ET	1V , 1kHz	47	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%		(1)
	C1005X5R563_ETS	C1005X5R563_ET	1V , 1kHz	56	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%		(1)
	C1005X5R683_ETS	C1005X5R683_ET	1V , 1kHz	68	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%		(l)
	C1005X5R823_ETS	C1005X5R823_ET	1V , 1kHz	82	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%		(1)
16V	C1005X5R104_ETS	C1005X5R104_ET	1V , 1kHz	100	nF	±10%, ±20%	0.50	±0.05	±0.05	5.0%	Paper, 10Kpcs	(I)
	C1005X5R124_ETS	C1005X5R124_ET	1V , 1kHz	120 150	nF nF	±10%, ±20% ±10%, ±20%	0.50 0.50	±0.05	±0.05	7.5%		(II) (II)
	C1005X5R154_ETS C1005X5R184_ETS	C1005X5R154_ET C1005X5R184_ET	1V , 1kHz 1V , 1kHz	180	nF	±10%, ±20% ±10%, ±20%	0.50	±0.05 ±0.05	±0.05 ±0.05	7.5% 7.5%		(II)
	C1005X5R104_ETS	C1005X5R224_ET	1V , 1kHz	220	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R684_ETS	C1005X5R684_ET	1V , 1kHz	680	nF	±10%, ±20%	0.50	±0.05	±0.05	12.5%		(II)
	C1005X5R105_ETS	C1005X5R105_ET	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.05	±0.05	12.5%		(II)
	C1005X5R225_ETS	C1005X5R225_ET	1V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.10	±0.10	12.5%		(II)*
	C1005X5R153_DTS	C1005X5R153_DT	1V , 1kHz	15	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(1)
	C1005X5R223 DTS	C1005X5R223 DT	1V , 1kHz	22	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(1)
	C1005X5R333 DTS	C1005X5R333 DT	1V , 1kHz	33	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(l)
	C1005X5R473 DTS C1005X5R563 DTS	C1005X5R473 DT C1005X5R563 DT	1V , 1kHz 1V , 1kHz	47 56	nF nF	±10%, ±20% ±10%, ±20%	0.50 0.50	±0.05 ±0.05	±0.05 ±0.05	7.5% 7.5%		(l) (l)
	C1005X5R683 DTS	C1005X5R683 DT	1V , 1kHz	68	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(I)
	C1005X5R823 DTS	C1005X5R823 DT	1V , 1kHz	82	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(I)
	C1005X5R104_DTS	C1005X5R104_DT	1V , 1kHz	100	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(I)
	C1005X5R124_DTS	C1005X5R124_DT	1V , 1kHz	120	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(II)
10V	C1005X5R154_DTS	C1005X5R154_DT	1V , 1kHz	150	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%	Paper, 10Kpcs	(l)
	C1005X5R184_DTS	C1005X5R184_DT	1V , 1kHz	180	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(l)
	C1005X5R224 DTS	C1005X5R224 DT	1V , 1kHz	220	nF	±10%, ±20%	0.50	±0.05	±0.05	7.5%		(II)
	C1005X5R334 DTS C1005X5R394 DTS	C1005X5R334_DT C1005X5R394_DT	1V , 1kHz 1V , 1kHz	330 390	nF nF	±10%, ±20% ±10%, ±20%	0.50 0.50	±0.05 ±0.05	±0.05 ±0.05	10.0%		(II) (II)
	C1005X5R394_DTS	C1005X5R394_DT	1V , 1kHz	470	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R684 DTS	C1005X5R684 DT	1V , 1kHz	680	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R105_DTS	C1005X5R105_DT	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R225 DTS	C1005X5R225 DT	0.5V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)*
	C1005X5R475 DTS	C1005X5R475_DT	1V , 1kHz	4.7	uF	±10%, ±20%	0.50	±0.15	±0.15	12.5%		(II)*
	C1005X5R106MDTS	C1005X5R106MDT	0.5V , 1kHz	10	uF	±20%	0.50	±0.20	±0.20	12.5%		(II)*
	C1005X5R223KCTS	C1005X5R223KCT	1V , 1kHz	22	nF	±10%	0.50	±0.05	±0.05	7.5%		(I)
	C1005X5R224 CTS	C1005X5R224_CT	1V , 1kHz	220	nF nF	±10%, ±20% ±10%, ±20%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)
1	C1005X5R334_CTS C1005X5R474_CTS	C1005X5R334_CT C1005X5R474_CT	1V , 1kHz 1V , 1kHz	330 470	nF nF	±10%, ±20% ±10%, ±20%	0.50 0.50	±0.05 ±0.05	±0.05 ±0.05	10.0%	i apei, iunpus	(II) (II)
	C1005X5R684_CTS	C1005X5R684_CT	1V , 1kHz	680	nF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X5R105MCTSA	01000/10/1001	1V , 1kHz	1.0	uF	±20%	0.30	±0.05	±0.03	12.5%	Paper, 15Kpcs	(II)*
6.3V	C1005X5R105_CTS	C1005X5R105_CT	0.5V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.05	±0.05	12.5%	Paper, 10Kpcs	(II)
	C1005X5R225MCTSA		0.5V , 1kHz	2.2	uF	±20%	0.30	±0.05	±0.03	10.0%	Paper, 15Kpcs	(II)*
	C1005X5R225_CTS	C1005X5R225_CT	0.5V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)*
	C1005X5R475MCTSA	0400511-5-1-	0.5V , 1kHz	4.7	uF	±20%	0.30	±0.20	±0.03	10.0%	Paper, 15Kpcs	(II)*
1	C1005X5R475 CTS	C1005X5R475_CT	0.5V , 1kHz	4.7	uF	±10%, ±20%	0.50	±0.15	±0.15	10.0%	Papar 101/20-	(II)*
1	C1005X5R106MCTS C1005X5R226MCTS	C1005X5R106MCT C1005X5R226MCT	0.5V , 1kHz 0.5V , 120Hz	10 22	uF uF	±20% ±20%	0.50 0.50	±0.20 ±0.20	±0.20 ±0.20	15.0% 15.0%	Paper, 10Kpcs	(II)* (II)*
	C1005X5R226WC13	C1005X5R226MC1	1V , 1kHz	1.0	uF	±20% ±10%, ±20%	0.50	±0.20	±0.20	15.0%		(II)
	C1005X5R225_BTS	C1005X5R225_BT	0.5V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)
41/	C1005X5R225MBTSA		0.5V , 1kHz	2.2	uF	±20%	0.30	±0.05	±0.03	10.0%	Paper, 15Kpcs	(II)
4V	C1005X5R475_BTS	C1005X5R475_BT	0.5V , 1kHz	4.7	uF	±10%, ±20%	0.50	±0.15	±0.15	10.0%	•	(II)
	C1005X5R106MBTS	C1005X5R106MBT	0.5V , 1kHz	10.0	uF	±20%	0.50	±0.20	±0.20	15.0%	Paper, 10Kpcs	(II)
	C1005X5R226MBTS	C1005X5R226MBT	0.5V , 120Hz	22	uF	±20%	0.50	±0.20	±0.20	15.0%		(II)*

<sup>□</sup> Tolerance Code: K=±10%, M=±20% ;Special tolerance on the request.

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%  $\,$ 

### • C1608X5R Series (EIA0603)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Tolerand	e(mm)	DF	Standard	Test
IN V	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1608X5R102KGTS	C1608X5R102KGT	1V , 1kHz	1.0	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R103KGTS	C1608X5R103KGT	1V , 1kHz	10	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R333KGTS	C1608X5R333KGT	1V , 1kHz	33	nF	±10%	0.80	±0.15	±0.15	5.0%		(l)
50V	C1608X5R224KGTS	C1608X5R224KGT	1V , 1kHz	220	nF	±10%	0.80	±0.15	±0.15	5.0%	Paper, 4Kpcs	(II)
	C1608X5R474_GTS	C1608X5R474_GT	1V , 1kHz	470	nF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X5R105_GTS	C1608X5R105_GT	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%		(II)
	C1608X5R225_GTS	C1608X5R225_GT	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X5R105_NTS	C1608X5R105_NT	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%		(II)
35V	C1608X5R225_NTS	C1608X5R225_NT	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%	Paper, 4Kpcs	(II)*
	C1608X5R475_NTS	C1608X5R475_NT	1V , 1kHz	4.7	uF	±10%, ±20%	0.80	±0.20	±0.20	10.0%	, , ,	(II)*
	C1608X5R106MNTS	C1608X5R106MNT	1V , 1kHz	10	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)*
	C1608X5R104_FTS	C1608X5R104_FT	1V , 1kHz	100	nF	±10%, ±20%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R224_FTS	C1608X5R224_FT	1V , 1kHz	220	nF	±10%, ±20%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R334KFTS	C1608X5R334KFT	1V , 1kHz	330	nF	±10%	0.80	±0.15	±0.15	7.5%		(l)
	C1608X5R474_FTS	C1608X5R474_FT	1V , 1kHz	470	nF	±10%, ±20%	0.80	±0.10	±0.10	5.0%		(II)
25V	C1608X5R684KFTS	C1608X5R684KFT	1V , 1kHz	680	nF	±10%	0.80	±0.15	±0.15	7.5%	Paper, 4Kpcs	(II)
	C1608X5R105_FTS	C1608X5R105_FT	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X5R105_FTSB	O4000VED00E□ET	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	+0/-0.10	12.5%		(II)*
	C1608X5R225 FTS	C1608X5R225_FT	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X5R475_FTS	C1608X5R475_FT	1V , 1kHz	4.7	uF	±10%, ±20%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X5R106MFTS	C1608X5R106MFT	1V , 1kHz	10	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X5R104_ETS	C1608X5R104_ET	1V , 1kHz	100	nF	±10%, ±20%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R224_ETS	C1608X5R224_ET	1V , 1kHz	220	nF	±10%, ±20%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X5R334_ETS	C1608X5R334_ET C1608X5R474_ET	1V , 1kHz	330 470	nF nF	±10%, ±20% ±10%, ±20%	0.80	±0.10	±0.10	5.0%		(I) (II)
	C1608X5R474_ETS		1V , 1kHz	680	nF		0.80	±0.10	±0.10	3.5%		_ ` /
16V	C1608X5R684_ETS C1608X5R105_ETS	C1608X5R684_ET C1608X5R105_ET	1V , 1kHz 1V , 1kHz	1.0	uF	±10%, ±20% ±10%, ±20%	0.80	±0.10 ±0.10	±0.10	7.5% 10.0%	Paper, 4Kpcs	(II) (II)
	C1608X5R105_ETSB	CIOUOASKIUS_EI	0.5V , 1kHz	1.0	uF	±10%, ±20% ±10%, ±20%	0.50	±0.10	+0/-0.10	10.0%		(II)
	C1608X5R225_ETS	C1608X5R225 ET	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%		(II)
	C1608X5R475_ETS	C1608X5R475 ET	1V , 1kHz	4.7	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%		(II)*
	C1608X5R106_ETS	C1608X5R106 ET	1V , 1kHz	10	uF	±10%, ±20%	0.80	±0.20	±0.13	10.0%		(II)*
	C1608X5R104 DTS	C1608X5R104 DT	1V , 1kHz	100	nF	±10%,±20%	0.80	±0.10	±0.10	7.5%		(I)
	C1608X5R224 DTS	C1608X5R224 DT	1V , 1kHz	220	nF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(1)
	C1608X5R334 DTS	C1608X5R334 DT	1V , 1kHz	330	nF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(I)
	C1608X5R474 DTS	C1608X5R474 DT	1V , 1kHz	470	nF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(I)
	C1608X5R684 DTS	C1608X5R684 DT	1V , 1kHz	680	nF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(l)
	C1608X5R105 DTS	C1608X5R105 DT	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(II)
	C1608X5R105 DTSB		1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	+0/-0.10	10.0%		(II)
10V	C1608X5R225 DTS	C1608X5R225 DT	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.10/±0.15	±0.15	10.0%	Paper, 4kpcs	(II)
	C1608X5R225 DTSB		0.5V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.10	+0/-0.10	10.0%		(II)*
	C1608X5R335 DTS	C1608X5R335 DT	1V , 1kHz	3.3	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X5R475 DTS	C1608X5R475 DT	1V , 1kHz	4.7	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X5R475 DTSB		1V , 1kHz	4.7	uF	±10%, ±20%	0.50	±0.20	±0.05	10.0%		(II)
	C1608X5R106 DTS	C1608X5R106 DT	1V , 1kHz	10	uF	±10%, ±20%	0.80	±0.20	±0.20	10.0%		(II)*
	C1608X5R226MDTS	C1608X5R226MDT	0.5V , 120Hz	22	uF	±20%	0.80	±0.25	±0.25	10.0%		(II)*
	C1608X5R226MDWS	C1608X5R226MDW	0.5V , 120Hz	22	uF	±20%	0.80	±0.20	±0.20	10.0%	Embossed, 4Kpcs	(II)*
	C1608X5R104_CTS	C1608X5R104 CT	1V , 1kHz	100	nF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(l)
	C1608X5R105_CTS	C1608X5R105_CT	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.10	±0.10	7.5%		(II)
	C1608X5R225 CTS	C1608X5R225_CT	1V , 1kHz	2.2	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%		(II)
0.017	C1608X5R475_CTS	C1608X5R475_CT	1V , 1kHz	4.7	uF	±10%, ±20%	0.80	±0.10	±0.10	10.0%	Danes 416	(II)
6.3V	C1608X5R106MCTSB		0.5V , 1kHz	10	uF	±20%	0.50	±0.10	±0.10	10.0%	Paper, 4Kpcs	(II)*
	C1608X5R106_CTS	C1608X5R106 CT	0.5V , 1kHz	10	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)*
	C1608X5R226MCTS	C1608X5R226MCT	0.5V , 120Hz	22	uF	±20%	0.80	±0.20	±0.20	15.0%		(II)*
	C1608X5R476MCTS	C1608X5R476MCT	0.5V , 120Hz	47	uF	±20%	0.80	±0.20	±0.20	12.5%		(II)*
	C1608X5R106MBTS	C1608X5R106MBT	0.5V , 1kHz	10	uF	±20%	0.80	±0.10	±0.10	10.0%		(II)
4V	C1608X5R226MBTS	C1608X5R226MBT	0.5V , 120Hz	22	uF	±20%	0.80	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)*
	C1608X5R476MBTS	C1608X5R476MBT	0.5V , 120Hz	47	uF	±20%	0.80	±0.20	±0.20	12.5%	• •	(II)*
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### • C2012X5R Series (EIA0805)

51/	D.105011.001	5.5550.500	Measuring	Capaci	tance	Available	Thick.	Tolerand	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C2012X5R105_GTS	C2012X5R105_GT	1V, 1kHz	1.0	uF	±10%, ±20%	0.85	±0.15	±0.15	10.0%	Paper, 4Kpcs	(II)
	C2012X5R225 GTS	C2012X5R225 GT	1V , 1kHz	2.2	uF	±10%, ±20%	0.85	±0.20	±0.15	10.0%	raper, 4rcpcs	(II)
50V	C2012X5R105 GPS	C2012X5R105 GP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%		(II)
500	C2012X5R225 GPS	C2012X5R225 GP	1V , 1kHz	2.2	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
	C2012X5R475 GPS	C2012X5R475 GP	1V , 1kHz	4.7	uF	±10%, ±20%	1.25	±0.20	±0.20	10.0%	Embosseu, anpcs	(II)
	C2012X5R106MGPS	C2012X5R106MGP	1V , 1kHz	10.0	uF	±20%	1.25	±0.20	±0.20	10.0%		(II)*
35V	C2012X5R106KNPS	C2012X5R106KNP	1V , 1kHz	10.0	uF	±10%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
	C2012X5R474MFPS	C2012X5R474MFP	1V , 1kHz	470	nF	±20%	1.25	±0.15	±0.20	5.0%	Embossed, 3Kpcs	(l)
	C2012X5R105_FTS	C2012X5R105 FT	1V , 1kHz	1.0	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R105_FPS	C2012X5R105 FP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(I)
	C2012X5R225 FTS	C2012X5R225 FT	1V , 1kHz	2.2	uF	±10%, ±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R225 FPS	C2012X5R225 FP	1V , 1kHz	2.2	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
25V	C2012X5R475_FTS	C2012X5R475 FT	1V , 1kHz	4.7	uF	±10%, ±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)*
	C2012X5R475 FPS	C2012X5R475 FP	1V , 1kHz	4.7	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
	C2012X5R106 FTS	C2012X5R106 FT	1V , 1kHz	10	uF	±10%, ±20%	0.85	±0.20	±0.10	12.5%	Paper, 4Kpcs	(II)*
	C2012X5R106 FPS	C2012X5R106 FP	1V , 1kHz	10	uF	±10%, ±20%	1.25	±0.20	±0.20	12.5%		(II)*
	C2012X5R226MFPS	C2012X5R226MFP	0.5V , 120Hz	22	uF	±20%	1.25	±0.20	±0.20	15.0%	Embossed, 3Kpcs	(II)
	C2012X5R226MFWS	C2012X5R226MFW	0.5V , 120Hz	22	uF	±20%	1.25	±0.20	±0.20	15.0%	Embossed, 2Kpcs	(II)
	C2012X5R105 ETS	C2012X5R105 ET	1V , 1kHz	1.0	uF	±10%, ±20%	0.85	±0.15	±0.15	10.0%	Paper, 4Kpcs	(II)
	C2012X5R105 EPS	C2012X5R105 EP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.20	5.0%	Embossed, 3Kpcs	(1)
	C2012X5R225 EPS	C2012X5R225 EP	1V , 1kHz	2.2	uF	±10%, ±20%	1.25	±0.15	±0.20	5.0%		(II)
	C2012X5R335 EPS	C2012X5R335 EP	1V , 1kHz	3.3	uF	±10%, ±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)
16V	C2012X5R475 ETS	C2012X5R475 ET	0.5V , 1kHz	4.7	uF	±10%, ±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R475 EPS	C2012X5R475 EP	1V , 1kHz	4.7	uF	±10%, ±20%	1.25	±0.15	±0.20	7.5%	Embossed, 3Kpcs	(II)
	C2012X5R106 ETS	C2012X5R106 ET	1V , 1kHz	10	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)*
	C2012X5R106 EPS	C2012X5R106 EP	0.5V , 1kHz	10	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)*
	C2012X5R226METS	C2012X5R226MET	0.5V , 120Hz	22	uF	±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)*
	C2012X5R225 DTS	C2012X5R225 DT	1V , 1kHz	2.2	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R335 DPS	C2012X5R335 DP	1V , 1kHz	3.3	uF	±10%, ±20%	1.25	±0.20	±0.20	10.0%		(II)
	C2012X5R475 DPS	C2012X5R475 DP	1V , 1kHz	4.7	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
10V	C2012X5R106 DTS	C2012X5R106 DT	0.5V , 1kHz	10	uF	±10%, ±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R106 DPS	C2012X5R106 DP	0.5V , 1kHz	10	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
	C2012X5R226MDTS	C2012X5R226MDT	0.5V , 120Hz	22	uF	±20%	0.85	±0.20	±0.15	10.0%	Paper, 4Kpcs	(II)*
	C2012X5R476MDPS	C2012X5R476MDP	0.5V , 120Hz	47	uF	±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
	C2012X5R225KCTS	C2012X5R225KCT	1V , 1kHz	2.2	uF	±10%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
	C2012X5R475 CPS	C2012X5R475 CP	0.5V , 1kHz	4.7	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(1)
	C2012X5R106 CTS	C2012X5R106 CT	0.5V , 1kHz	10	uF	±10%, ±20%	0.85	±0.20	±0.15	10.0%	Paper, 4Kpcs	(II)
	C2012X5R106 CPS	C2012X5R106 CP	0.5V , 1kHz	10	uF	±10%, ±20%	1.25	±0.15	±0.20	10.0%	Embossed, 3Kpcs	(II)
6.3V	C2012X5R226MCTS	C2012X5R226MCT	0.5V , 120Hz	22	uF	±20%	0.85	±0.15	±0.15	10.0%	Paper, 4Kpcs	(II)
3.5 \$	C2012X5R226 CPS	C2012X5R226 CP	0.5V , 120Hz	22	uF	±10%, ±20%	1.25	±0.15	±0.15	10.0%	Embossed, 3Kpcs	(II)
	C2012X5R476MCTS	C2012X5R220_CF	0.5V , 120Hz	47	uF	±20%	0.85	±0.13	±0.15	10.0%	Paper, 4Kpcs	(II)*
	C2012X5R476MCTS	C2012X5R476MCP	0.5V , 120Hz	47	uF	±20%	1.25	±0.20	±0.13	10.0%	Embossed, 3Kpcs	(11)*
	C2012X5R476WCFS	C2012X5R476MCP	0.5V , 120Hz	100	uF	±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
	C2012X5R107MCPS	C2012X5R107MCP	0.5V , 120Hz	47	uF	±20% ±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
4V	C2012X5R476MBPS	C2012X5R476MBP	0.5V , 120Hz	100	ur uF	±20% ±20%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
	02012A3K10/101BP3	OZUIZASK IU/ WIBP	U.5V , IZUMZ	100	uг	±20%	1.20	±0.20	±0.20	10.0%	EIIDUSSEU, SNDCS	1 (11)

<sup>□</sup> Tolerance Code: K=±10%, M=±20% ;(II)\* High temperature load life test are applicable in rated voltage \*100%

### • C3216X5R Series (EIA1206)

RV	DARFON RAI	DARFON DAN S	Measuring	Capaci	tance	Available	Thick.	Tolerand	ce(mm)	DF	Standard	Test
ΚV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C3216X5R225_GTS	C3216X5R225_GT	1V , 1kHz	2.2	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
50V	C3216X5R475 GTS	C3216X5R475 GT	1V , 1kHz	4.7	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
50V	C3216X5R475 GPS	C3216X5R475_GP	1V , 1kHz	4.7	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%	Embossed, 2Kpcs	(II)
	C3216X5R106 GPS	C3216X5R106 GP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.20	±0.20	10.0%	Embosseu, zkpcs	(II)
35V	C3216X5R106_NTS	C3216X5R106_NT	1V , 1kHz	10	uF	±10%, ±20%	0.85	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)*
337	C3216X5R106_NPS	C3216X5R106_NP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%	Embossed, 2Kpcs	(II)
	C3216X5R105KFTSE		1V , 1kHz	1.0	uF	±10%	0.85	±0.15	±0.10	3.5%	Paper, 4Kpcs	(l)
	C3216X5R225_FPS	C3216X5R225_FP	1V , 1kHz	2.2	uF	±10%, ±20%	1.60	±0.20	±0.30	5.0%		(1)
25V	C3216X5R475_FPS	C3216X5R475_FP	1V , 1kHz	4.7	uF	±10%, ±20%	1.60	±0.20	±0.30	5.0%	Embossed, 2Kpcs	(l)
201	C3216X5R106_FPS	C3216X5R106_FP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%		(II)
	C3216X5R226MFTSE	C3216X5R226MFT	0.5V , 120Hz	22	uF	±20%	0.85	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)*
	C3216X5R226_FPSL	C3216X5R226_FP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(II)
	C3216X5R225_EPS	C3216X5R225_EP	1V , 1kHz	2.2	uF	±10%, ±20%	1.60	±0.20	±0.30	5.0%		(l)
	C3216X5R475_EPS	C3216X5R475_EP	1V , 1kHz	4.7	uF	±10%, ±20%	1.60	±0.20	±0.30	5.0%	Embossed, 2Kpcs	(l)
16V	C3216X5R106_EPS	C3216X5R106_EP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%	Lilibusseu, Zixpus	(II)
	C3216X5R226_EPS	C3216X5R226_EP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%		(II)
	C3216X5R476MEPS	C3216X5R476MEP	0.5V , 120Hz	47	uF	±20%	1.60	±0.30	±0.30	10.0%	Embossed,2Kpcs	(II)
	C3216X5R225 DPS	C3216X5R225 DP	1V , 1kHz	2.2	uF	±10%, ±20%	1.60	±0.20	±0.30	7.5%		(l)
	C3216X5R475 DPS	C3216X5R475 DP	1V , 1kHz	4.7	uF	±10%, ±20%	1.60	±0.20	±0.30	7.5%	Embossed, 2Kpcs	(l)
10V	C3216X5R106 DPS	C3216X5R106 DP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%	Embosseu, zripos	(II)
100	C3216X5R226 DPS	C3216X5R226 DP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%		(II)
	C3216X5R226MDTSE	C3216X5R226MDT	0.5V , 120Hz	22	uF	±20%	0.85	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)*
	C3216X5R476 DPS	C3216X5R476 DP	0.5V , 120Hz	47	uF	±10%, ±20%	1.60	±0.20	±0.30	10.0%	Embossed, 2Kpcs	(II)
	C3216X5R106KCPS	C3216X5R106KCP	1V , 1kHz	10	uF	±10%	1.60	±0.20	±0.30	15.0%		(II)
6.3V	C3216X5R226 CPS	C3216X5R226 CP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.20	±0.30	15.0%		(II)
0.5 v	C3216X5R476MCPS	C3216X5R476MCP	0.5V , 120Hz	47	uF	±20%	1.60	±0.20	±0.20	10.0%	Lilibusseu, Zixpus	(II)
	C3216X5R107MCPS	C3216X5R107MCP	0.5V , 120Hz	100	uF	±20%	1.60	±0.30	±0.30	15.0%		(II)
	C3216X5R226_BPS	C3216X5R226 BP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.20	±0.30	15.0%		(II)
4V	C3216X5R476MBPS	C3216X5R476MBP	0.5V , 120Hz	47	uF	±20%	1.60	±0.20	±0.30	15.0%	Embossed, 2Kpcs	(II)
4 V	C3216X5R107MBPS	C3216X5R107MBP	0.5V , 120Hz	100	uF	±20%	1.60	±0.30	±0.30	15.0%	Linbusseu, ZNPCS	(II)
	C3216X5R227MBPSL	C3216X5R227MBP	0.5V , 120Hz	220	uF	±20%	1.60	±0.30	±0.30	15.0%		(II)

### • C3225X5R Series (EIA1210)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Tolerand	e(mm)	DF	Standard	Test
κv	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
50V	C3225X5R106 GPS	C3225X5R106 GP	1V , 1kHz	10	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	5.0%	Embossed, 1Kpcs	(II)
35V	C3225X5R106_NPS	C3225X5R106_NP	1V , 1kHz	10	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	5.0%	Embossed, 1Kpcs	(l)
	C3225X5R475_FWS	C3225X5R475_FW	1V , 1kHz	4.7	uF	±10%, ±20%	2.00	±0.30/±0.20	±0.20	10.0%	Embossed, 1Kpcs	(l)
25V	C3225X5R106_FPS	C3225X5R106_FP	1V , 1kHz	10	uF	±10%, ±20%	2.00	±0.30/±0.20	±0.20	10.0%	Embossed, 2Kpcs	(l)
	C3225X5R226_FPS	C3225X5R226_FP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	10.0%	Embossed, 1Kpcs	(II)
	C3225X5R475_EWS	C3225X5R475_EW	1V , 1kHz	4.7	uF	±10%, ±20%	2.00	±0.30/±0.20	±0.20	5.0%	Embossed, 1Kpcs	(l)
	C3225X5R106_EPS	C3225X5R106_EP	1V , 1kHz	10	uF	±10%, ±20%	2.00	±0.30/±0.20	±0.20	5.0%	Embossed, 2Kpcs	(l)
	C3225X5R226_EWS	C3225X5R226 EW	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	15.0%	Embossed,0.5Kpcs	(II)
16V	C3225X5R226_EPS	C3225X5R226_EP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	15.0%	Embossed, 1Kpcs	(II)
167	C3225X5R476MEPSS	C3225X5R476MEP	0.5V , 120Hz	47	uF	±20%	1.90	±0.30/±0.20	+0.1/-0.2	15.0%	Embossed,2Kpcs	(II)
	C3225X5R476_EWS	C3225X5R476_EW	0.5V , 120Hz	47	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	15.0%	Embossed,0.5Kpcs	(II)
	C3225X5R476_EPS	C3225X5R476_EP	0.5V , 120Hz	47	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	15.0%	Embassed 1Knss	(II)
	C3225X5R107MEPS	C3225X5R107MEP	0.5V , 120Hz	100	uF	±20%	2.50	±0.30	±0.30	10.0%	Embossed, 1Kpcs	(II)
	C3225X5R226 DPS	C3225X5R226 DP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	10.0%		(II)
10V	C3225X5R476 DPS	C3225X5R476 DP	0.5V , 120Hz	47	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	10.0%	Embossed, 1Kpcs	(II)
	C3225X5R107MDPS	C3225X5R107MDP	0.5V , 120Hz	100	uF	±20%	2.50	±0.30/±0.20	±0.30	10.0%		(II)
	C3225X5R226 CPS	C3225X5R226 CP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	10.0%		(II)
6.3V	C3225X5R476_CPS	C3225X5R476 CP	0.5V , 120Hz	47	uF	±10%, ±20%	2.50	±0.30/±0.20	±0.20	15.0%	Embossed, 1Kpcs	(II)
	C3225X5R107MCPS	C3225X5R107MCP	0.5V , 120Hz	100	uF	±20%	2.50	±0.30	±0.30	15.0%		(II)

### • C4532X5R Series (EIA1812)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Tolerand	e(mm)	DF	Standard
I. V	DARFONFIN	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing
50V	C4532X5R225KGPS	C4532X5R225KGP	1V , 1kHz	2.2	uF	±10%	1.60	±0.30	±0.20	10.0%	Embossed, 1Kpcs

<sup>□</sup> Tolerance Code: K=±10%, M=±20% ;Special tolerance on the request.;

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%  $\,$ 

### X6S Series

### C0603X6S Series (EIA0201)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
25V	C0603X6S103KFTS	C0603X6S103KFT	1V , 1kHz	10	nF	±10%	0.30	± 0.03	±0.03	5.0%	Paper, 15Kpcs	(l)
251	C0603X6S104KFTS	C0603X6S104KFT	1V , 1kHz	100	nF	±10%	0.30	± 0.03	±0.03	10.0%	rapel, longes	(II)*
16V	C0603X6S103KETS	C0603X6S103KET	1V , 1kHz	10	nF	±10%	0.30	± 0.03	± 0.03	5.0%	Paper, 15Kpcs	(1)
100	C0603X6S104_ETS	C0603X6S104_ET	1V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%	rapel, longes	(II)
10V	C0603X6S104KDTS	C0603X6S104KDT	1V , 1kHz	100	nF	±10%	0.30	± 0.03	±0.03	10.0%	Paper, 15Kpcs	(II)
100	C0603X6S224 DTS	C0603X6S224_DT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%	rapel, longes	(II)
	C0603X6S103 CTS	C0603X6S103_CT	1V , 1kHz	10	nF	±10%, ±20%	0.30	± 0.03	±0.03	5.0%		(l)
	C0603X6S473_CTS	C0603X6S473 CT	1V , 1kHz	47	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%		(l)
6.3V	C0603X6S104 CTS	C0603X6S104_CT	1V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%	Paper, 15Kpcs	(II)*
	C0603X6S224 CTS	C0603X6S224_CT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%		(II)*
	C0603X6S105MCTS	C0603X6S105MCT	0.5V , 1kHz	1	uF	±20%	0.30	± 0.09	± 0.09	10.0%		(II)*
	C0603X6S104_BTS	C0603X6S104 BT	0.5V , 1kHz	100	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%		(II)
4V	C0603X6S224_BTS	C0603X6S224_BT	0.5V , 1kHz	220	nF	±10%, ±20%	0.30	± 0.03	±0.03	10.0%		(II)
4 4	C0603X6S474MBTS	C0603X6S474MBT	0.5V , 1kHz	470	nF	±20%	0.30	± 0.03	±0.03	10.0%	rapel, lonpus	(II)
	C0603X6S105MBTS	C0603X6S105MBT	0.5V , 1kHz	1	uF	±20%	0.30	± 0.09	± 0.09	10.0%		(II)*

## • C1005X6S Series (EIA0402)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1005X6S104KFTS	C1005X6S104KFT	1V , 1kHz	100	nF	±10%	0.50	±0.05	±0.05	10.0%		(II)
25V	C1005X6S224KFTS	C1005X6S224KFT	1V , 1kHz	220	nF	±10%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)
	C1005X6S105_FTS	C1005X6S105_FT	0.5V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	±0.10	10.0%		(II)*
	C1005X6S224KETS	C1005X6S224KET	1V , 1kHz	220	nF	±10%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)
16V	C1005X6S105_ETS	C1005X6S105_ET	0.5V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.10	±0.10	12.5%	Paper, 10Kpcs	(II)*
	C1005X6S225METS	C1005X6S225MET	1V , 1kHz	2.2	uF	±20%	0.50	±0.20	±0.20	10.0%	Paper, 10Kpcs	(II)
10V	C1005X6S225 DTS	C1005X6S225 DT	1V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.20	±0.20	10.0%	Paper, 10Kpcs	(II)
	C1005X6S224KCTS	C1005X6S224KCT	1V , 1kHz	220	nF	±10%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X6S105_CTS	C1005X6S105 CT	1V , 1kHz	1.0	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%		(II)*
6.3V	C1005X6S225 CTS	C1005X6S225 CT	0.5V , 1kHz	2.2	uF	±10%, ±20%	0.50	±0.05	±0.05	10.0%	Paper, 10Kpcs	(II)*
	C1005X6S475MCTS	C1005X6S475MCT	0.5V , 1kHz	4.7	uF	±20%	0.50	±0.15	±0.15	10.0%		(II)*
	C1005X6S106MCTS	C1005X6S106MCT	0.5V , 1kHz	10	uF	±20%	0.50	±0.20	±0.20	10.0%		(II)*
4V	C1005X6S106MBTS	C1005X6S106MBT	0.5V , 1kHz	10	uF	±20%	0.50	±0.20	±0.20	10.0%	Paper, 10Kpcs	(II)*

### • C1608X6S Series (EIA0603)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
25V	C1608X6S475_FTS	C1608X6S475_FT	1V , 1kHz	4.7	uF	±10%,±20%	0.80	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)*
	C1608X6S105KETS	C1608X6S105KET	1V , 1kHz	1.0	uF	±10%	0.80	±0.15	±0.15	10.0%		(II)
16V	C1608X6S225KETS	C1608X6S225KET	1V , 1kHz	2.2	uF	±10%	0.80	±0.10	±0.10	10.0%	Paper, 4Kpcs	(II)
100	C1608X6S475KETS	C1608X6S475KET	1V , 1kHz	4.7	uF	±10%	0.80	±0.20	±0.20	10.0%	raper, 4Kpcs	(II)
	C1608X6S106METS	C1608X6S106MET	1V , 1kHz	10	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X6S225DTS	C1608X6S225KDT	1V , 1kHz	2.2	uF	±10%	0.80	±0.10	±0.10	10.0%	0%	(II)
10V	C1608X6S475KDTS	C1608X6S475KDT	1V , 1kHz	4.7	иF	±10%	0.80	±0.15	±0.15	10.0%	Paper, 4Kpcs	(II)
	C1608X6S106MDTS	C1608X6S106MDT	1V , 1kHz	10	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X6S475 CTS	C1608X6S475 CT	1V , 1kHz	4.7	иF	±10%,±20%	0.80	±0.10	±0.10	10.0%		(II)*
6.3V	C1608X6S106MCTS	C1608X6S106MCT	0.5V , 120Hz	10	uF	±20%	0.80	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)
	C1608X6S226MCTS	C1608X6S226MCT	0.5V , 120Hz	22	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)*
4V	C1608X6S106MBTS	C1608X6S106MBT	0.5V , 120Hz	10	uF	±20%	0.80	±0.20	±0.20	10.0%	Donor 4Knoo	(II)
40	C1608X6S226MBTS	C1608X6S226MBT	0.5V , 120Hz	22	uF	±20%	0.80	±0.20	±0.20	10.0%	Paper, 4Kpcs	(II)*

### • C2012X6S Series (EIA0805)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON P/N	DARFON P/N Z	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
50V	C2012X6S475KGPS	C2012X6S475KGP	1V , 1kHz	4.7	uF	±10%	1.25	±0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)
25V	C2012X6S106KFPS	C2012X6S106KFP	0.5V , 1kHz	10	uF	±10%	1.25	±0.15	±0.20	12.5%	Embossed, 3Kpcs	(II)*
16V	C2012X6S106KEPS	C2012X6S106KEP	1V , 1kHz	10	uF	±10%	1.25	±0.15	±0.15	10.0%	Embossed, 3Kpcs	(II)
100	C2012X6S226MEPS	C2012X6S226MEP	0.5V , 120Hz	22	uF	±20%	1.25	±0.20	±0.20	10.0%	Embosseu, arpos	(II)*
10V	C2012X6S106KDPS	C2012X6S106KDP	0.5V , 1kHz	10	uF	±10%	1.25	±0.15	±0.15	10.0%	Embassed 2Knes	(II)*
100	C2012X6S226MDPS	C2012X6S226MDP	0.5V , 120Hz	22	uF	±20%	1.25	±0.20	±0.20	10.0%	Embossed 3Kncs	(II)
6.3V	C2012X6S106MCPS	C2012X6S106MCP	0.5V , 1kHz	10	uF	±20%	1.25	±0.15	±0.15	10.0%	Embossed, 3Kpcs	(II)*
0.5 V	C2012X6S226MCPS	C2012X6S226MCP	0.5V , 120Hz	22	uF	±20%	1.25	±0.15	±0.15	10.0%	Embosseu, artpos	(II)*
	C2012X6S106MBPS	C2012X6S106MBP	0.5V , 1kHz	10	uF	±20%	1.25	±0.15	±0.15	10.0%		(II)
4V	C2012X6S226MBPS	C2012X6S226MBP	0.5V , 120Hz	22	uF	±20%	1.25	±0.15	±0.15	10.0%		(II)
40	C2012X6S476MBPS	C2012X6S476MBP	0.5V , 120Hz	47	uF	±20%	1.25	±0.20	±0.20	10.0%	Ellipossed, skpcs	(II)*
	C2012X6S107MBPS	C2012X6S107MBP	0.5V , 120Hz	100	uF	±20%	1.25	±0.20	±0.20	10.0%		(II)*

### • C3216X6S Series (EIA1206)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
KV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
35V	C3216X6S106KNPS	C3216X6S106KNP	1V , 1kHz	10	uF	±10%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)
25V	C3216X6S106KFPS	C3216X6S106KFP	1V , 1kHz	10	uF	±10%	1.60	±0.20	±0.20	10.0%	Embassed Olypse	(II)
25 V	C3216X6S226 FPS	C3216X6S226 FP	0.5V , 120Hz	22	uF	±10%,±20%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(II)
16V	C3216X6S226MEPS	C3216X6S226MEP	0.5V , 120Hz	22	uF	±20%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)
10V	C3216X6S226MDPS	C3216X6S226MDP	0.5V , 120Hz	22	uF	±20%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)
100	C3216X6S476MDPS	C3216X6S476MDP	0.5V , 120Hz	47	uF	±20%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(II)
6.3V	C3216X6S476MCPS	C3216X6S476MCP	0.5V , 120Hz	47	uF	±20%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)
4V	C3216X6S226MBTS	C3216X6S226MBT	0.5V , 120Hz	22	uF	±20%	0.85	±0.20	±0.10	10.0%	Paper, 4Kpcs	(II)
-+ v	C3216X6S107MBPS	C3216X6S107MBP	0.5V , 120Hz	100	uF	±20%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)

### • C3225X6S Series (EIA1210)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
16V	C3225X6S476MEPS	C3225X6S476MEP	0.5V , 120Hz	47	uF	±20%	2.50	±0.30	±0.20	10.0%	Embossed, 1Kpcs	(II)*
6.3V	C3225X6S107MCPS	C3225X6S107MCP	0.5V , 120Hz	100	uF	±20%	2.50	±0.30	±0.30	10.0%	Embossed, 1Kpcs	(II)

 $<sup>\</sup>hfill\Box$  Tolerance Code: K=±10%, M=±20% ;Special tolerance on the request.;

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%  $\,$ 

- X7R Series
- C0603X7R Series(EIA0201)

RV	DARFON P/N	DAREON BAN 2	Measuring	Capaci	tance	Avoilable Telerance	Thick.	Toleran	ce(mm)	DF	Standard	Test
κv	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C0603X7R101_GTS	C0603X7R101_GT	1V , 1kHz	100	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R121KGTS	C0603X7R121KGT	1V , 1kHz	120	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R151KGTS	C0603X7R151KGT	1V , 1kHz	150	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R181KGTS	C0603X7R181KGT	1V , 1kHz	180	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(I)
	C0603X7R221 GTS	C0603X7R221 GT	1V , 1kHz	220	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R271KGTS	C0603X7R271KGT	1V , 1kHz	270	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R331KGTS	C0603X7R331KGT	1V , 1kHz	330	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
50V	C0603X7R391KGTS C0603X7R471KGTS	C0603X7R391KGT C0603X7R471KGT	1V , 1kHz 1V , 1kHz	390 470	pF pF	±10% ±10%	0.30	± 0.03 ± 0.03	± 0.03 ± 0.03	3.0%	Paper, 15Kpcs	(l) (l)
001	C0603X7R561KGTS	C0603X7R561KGT	1V , 1kHz	560	pF	±10%	0.30	± 0.03	± 0.03	3.0%	r apor, rorepoo	(I)
	C0603X7R681 ☐ GTS	C0603X7R681 GT	1V , 1kHz	680	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.0%		(I)
	C0603X7R821KGTS	C0603X7R821KGT	1V , 1kHz	820	pF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R102KGTS	C0603X7R102KGT	1V , 1kHz	1.0	nF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R122KGTS	C0603X7R122KGT	1V , 1kHz	1.2	nF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R152KGTS	C0603X7R152KGT	1V , 1kHz	1.5	nF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R182KGTS	C0603X7R182KGT	1V , 1kHz	1.8	nF	±10%	0.30	± 0.03	± 0.03	3.0%		(l)
	C0603X7R222KGTS	C0603X7R222KGT	1V , 1kHz	2.2	nF	±10%	0.30	± 0.03	± 0.03	3.0%		(l) (l)
	C0603X7R101KFTS C0603X7R121KFTS	C0603X7R101KFT C0603X7R121KFT	1V , 1kHz 1V , 1kHz	100 120	pF pF	±10% ±10%	0.30	± 0.03 ± 0.03	± 0.03 ± 0.03	3.5%		(I)
	C0603X7R121RFTS	C0603X7R121RFT	1V , 1kHz	150	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R181KFTS	C0603X7R181KFT	1V , 1kHz	180	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R221KFTS	C0603X7R221KFT	1V , 1kHz	220	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R271KFTS	C0603X7R271KFT	1V , 1kHz	270	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(l)
	C0603X7R331KFTS	C0603X7R331KFT	1V , 1kHz	330	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(l)
	C0603X7R391KFTS	C0603X7R391KFT	1V,1kHz	390	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R471_FTS	C0603X7R471_FT	1V , 1kHz	470	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.5%		(l)
25V	C0603X7R561KFTS	C0603X7R561KFT	1V , 1kHz	560	pF	±10%	0.30	± 0.03	± 0.03	3.5%	Paper, 15Kpcs	(l)
	C0603X7R681KFTS	C0603X7R681KFT C0603X7R821KFT	1V , 1kHz 1V , 1kHz	680	pF pF	±10%	0.30	± 0.03 ± 0.03	± 0.03 ± 0.03	3.5%		(l)
	C0603X7R821KFTS C0603X7R102KFTS	C0603X7R621KFT	1V , 1kHz	820 1.0	nF	±10% ±10%	0.30	± 0.03	± 0.03	3.5%		(l) (l)
	C0603X7R102RFTS	C0603X7R102RFT	1V , 1kHz	1.2	nF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R152KFTS	C0603X7R152KFT	1V , 1kHz	1.5	nF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R182KFTS	C0603X7R182KFT	1V , 1kHz	1.8	nF	±10%	0.30	± 0.03	± 0.03	3.5%		(l)
	C0603X7R222KFTS	C0603X7R222KFT	1V , 1kHz	2.2	nF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R332KFTS	C0603X7R332KFT	1V , 1kHz	3.3	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X7R682KFTS	C0603X7R682KFT	1V , 1kHz	6.8	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R103KFTS	C0603X7R103KFT	1V , 1kHz	10	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R101KETS	C0603X7R101KET	1V , 1kHz	100	pF pF	±10%	0.30	± 0.03 ± 0.03	± 0.03 ± 0.03	3.5%		(l)
	C0603X7R221KETS C0603X7R331KETS	C0603X7R221KET C0603X7R331KET	1V , 1kHz 1V , 1kHz	220 330	рF	±10% ±10%	0.30	± 0.03	± 0.03	3.5%		(l) (l)
	C0603X7R471KETS	C0603X7R471KET	1V , 1kHz	470	pF	±10%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R681 ETS	C0603X7R681 ET	1V , 1kHz	680	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R821 ETS	C0603X7R821 ET	1V , 1kHz	820	pF	±10%, ±5%	0.30	± 0.03	± 0.03	3.5%		(l)
	C0603X7R102 ETS	C0603X7R102_ET	1V , 1kHz	1.0	nF	±10%, ±5%	0.30	± 0.03	± 0.03	3.5%		(I)
	C0603X7R152 ETS	C0603X7R152 ET	1V , 1kHz	1.5	nF	±10%, ±5%	0.30	± 0.03	± 0.03	3.5%		(I)
16V	C0603X7R222KETS	C0603X7R222KET	1V , 1kHz	2.2	nF	±10%	0.30	± 0.03	± 0.03	3.5%	Paper, 15Kpcs	(I)
	C0603X7R272□ETS	C0603X7R272_ET	1V , 1kHz	2.7	nF	±10%, ±5%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R332KETS	C0603X7R332KET	1V , 1kHz	3.3	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R392KETS	C0603X7R392KET	1V , 1kHz	3.9	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X7R472KETS	C0603X7R472KET	1V , 1kHz	4.7	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X7R562KETS	C0603X7R562KET	1V , 1kHz	5.6	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R682KETS	C0603X7R682KET	1V , 1kHz	6.8	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R822KETS C0603X7R103KETS	C0603X7R822KET C0603X7R103KET	1V , 1kHz 1V , 1kHz	8.2 10	nF nF	±10% ±10%	0.30	± 0.03 ± 0.03	± 0.03 ± 0.03	5.0%		(l) (l)
	C0603X7R103KE1S	C0603X7R103RE1	1V , 1kHz	1.8	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X7R102RDTS	C0603X7R182RDT	1V , 1kHz	2.2	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(I)
	C0603X7R272_DTS	C0603X7R272 DT	1V , 1kHz	2.7	nF	±10%, ±5%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R332KDTS	C0603X7R332KDT	1V , 1kHz	3.3	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
10V	C0603X7R392KDTS	C0603X7R392KDT	1V , 1kHz	3.9	nF	±10%	0.30	± 0.03	± 0.03	5.0%	Paper, 15Kpcs	(l)
100	C0603X7R472KDTS	C0603X7R472KDT	1V , 1kHz	4.7	nF	±10%	0.30	± 0.03	± 0.03	5.0%	raper, ranpus	(I)
	C0603X7R562KDTS	C0603X7R562KDT	1V , 1kHz	5.6	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R682KDTS	C0603X7R682KDT	1V , 1kHz	6.8	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
	C0603X7R822KDTS	C0603X7R822KDT	1V , 1kHz	8.2	nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
-	C0603X7R103KDTS	C0603X7R103KDT	1V , 1kHz	10	nF nF	±10%	0.30	± 0.03	± 0.03	5.0%		(l)
6.3V	C0603X7R222KCTS C0603X7R103KCTS	C0603X7R222KCT C0603X7R103KCT	1V , 1kHz 1V , 1kHz	2.2	nF nF	±10% ±10%	0.3	± 0.03 ± 0.03	± 0.03 ± 0.03	5.00%	Paper, 15Kpcs	(l) (l)
	010000V1V100VC19	OUUUUAA I NIUUNU I	iv,iK⊓∠	ΙŪ	1117	<b>IIU</b> /0	0.30	= 0.03	± 0.03	J.U /0		(1)

 $<sup>\</sup>hfill\Box$  Tolerance Code: J=±5%, K=±10%, M=±20%; Special tolerance on the request.

### • C1005X7R Series (EIA0402)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available Tolerance	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1005X7R101 GTS	C1005X7R101 GT	1V , 1kHz	100	pF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R121KGTS	C1005X7R121KGT	1V , 1kHz	120	рF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R151KGTS	C1005X7R151KGT	1V , 1kHz	150	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R181KGTS	C1005X7R181KGT	1V , 1kHz	180	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R221KGTS	C1005X7R221KGT	1V , 1kHz	220	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R271KGTS C1005X7R331KGTS	C1005X7R271KGT C1005X7R331KGT	1V , 1kHz 1V , 1kHz	270 330	pF pF	±10% ±10%	0.50	±0.05 ±0.05	±0.05 ±0.05	3.0%		(l) (l)
	C1005X7R331KGTS	C1005X7R331KGT	1V , 1kHz	390	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R391RGTS	C1005X7R391RGT	1V , 1kHz	470	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R561KGTS	C1005X7R561KGT	1V , 1kHz	560	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R681KGTS	C1005X7R681KGT	1V , 1kHz	680	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R751KGTS	C1005X7R751KGT	1V , 1kHz	750	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R821KGTS	C1005X7R821KGT	1V , 1kHz	820	рF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R102 GTS	C1005X7R102 GT	1V , 1kHz	1.0	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R122KGTS	C1005X7R122KGT	1V , 1kHz	1.2	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R152KGTS	C1005X7R152KGT	1V , 1kHz	1.5	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
50V	C1005X7R182KGTS	C1005X7R182KGT	1V , 1kHz	1.8	nF	±10%	0.50	±0.05	±0.05	3.0%	Paper, 10Kpcs	(l)
	C1005X7R222 GTS	C1005X7R222 GT	1V , 1kHz	2.2	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R272 GTS	C1005X7R272 GT	1V , 1kHz	2.7	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R332 GTS	C1005X7R332 GT	1V , 1kHz	3.3	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R392KGTS	C1005X7R392KGT	1V , 1kHz	3.9	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R472KGTS	C1005X7R472KGT	1V , 1kHz	4.7	nF nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R562KGTS C1005X7R682KGTS	C1005X7R562KGT C1005X7R682KGT	1V , 1kHz 1V , 1kHz	5.6 6.8	nF nF	±10% ±10%	0.50	±0.05 ±0.05	±0.05 ±0.05	3.0%		(l) (l)
	C1005X7R822KGTS	C1005X7R882KGT	1V , 1kHz	8.2	nF	±10% ±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R822RGTS	C1005X7R022RG1	1V , 1kHz	10	nF	±10% ±10%, ±5%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R123KGTS	C1005X7R103_G1	1V , 1kHz	12	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R153KGTS	C1005X7R123RGT	1V , 1kHz	15	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R183KGTS	C1005X7R183KGT	1V , 1kHz	18	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R223KGTS	C1005X7R223KGT	1V , 1kHz	22	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R333KGTS	C1005X7R333KGT	1V , 1kHz	33	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R473KGTS	C1005X7R473KGT	1V , 1kHz	47	nF	±10%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X7R104KGTS	C1005X7R104KGT	1V , 1kHz	100	nF	±10%	0.50	±0.10	±0.10	10.0%		(II)
	C1005X7R101KFTS	C1005X7R101KFT	1V , 1kHz	100	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R121KFTS	C1005X7R121KFT	1V , 1kHz	120	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R151KFTS	C1005X7R151KFT	1V , 1kHz	150	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R181KFTS	C1005X7R181KFT	1V , 1kHz	180	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R221KFTS	C1005X7R221KFT	1V , 1kHz	220 270	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R271KFTS C1005X7R331KFTS	C1005X7R271KFT C1005X7R331KFT	1V , 1kHz 1V , 1kHz	330	pF pF	±10% ±10%	0.50	±0.05 ±0.05	±0.05 ±0.05	3.0%		(l) (l)
	C1005X7R391KFTS	C1005X7R391KFT	1V , 1kHz	390	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R471KFTS	C1005X7R471KFT	1V , 1kHz	470	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R561KFTS	C1005X7R561KFT	1V , 1kHz	560	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R681KFTS	C1005X7R681KFT	1V , 1kHz	680	pF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R821KFTS	C1005X7R821KFT	1V , 1kHz	820	pF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R102KFTS	C1005X7R102KFT	1V , 1kHz	1.0	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R122KFTS	C1005X7R122KFT	1V , 1kHz	1.2	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R152KFTS	C1005X7R152KFT	1V , 1kHz	1.5	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R182KFTS	C1005X7R182KFT	1V , 1kHz	1.8	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R222KFTS	C1005X7R222KFT	1V , 1kHz	2.2	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
25V	C1005X7R272KFTS	C1005X7R272KFT	1V , 1kHz	2.7	nF	±10%	0.50	±0.05	±0.05	3.0%	Paper, 10Kpcs	(I)
	C1005X7R332_FTS	C1005X7R332_FT	1V , 1kHz 1V . 1kHz	3.3	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%	, .opoo	(l)
	C1005X7R392KFTS C1005X7R472KFTS	C1005X7R392KFT C1005X7R472KFT	1V , 1kHz 1V , 1kHz	3.9 4.7	nF nF	±10% ±10%	0.50 0.50	±0.05 ±0.05	±0.05 ±0.05	3.0%		(l) (l)
	C1005X7R472KFTS C1005X7R562KFTS	C1005X7R472KFT	1V , 1kHz	5.6	nF	±10% ±10%	0.50	±0.05 ±0.05	±0.05	3.0%		(I)
	C1005X7R502KFTS	C1005X7R502RFT	1V , 1kHz	6.8	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R822KFTS	C1005X7R822KFT	1V , 1kHz	8.2	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R103 FTS	C1005X7R103 FT	1V , 1kHz	10	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R123KFTS	C1005X7R123KFT	1V , 1kHz	12	nF	±10%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R153 FTS	C1005X7R153 FT	1V , 1kHz	15	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(I)
	C1005X7R183KFTS	C1005X7R183KFT	1V , 1kHz	18	nF	±10%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R223_FTS	C1005X7R223_FT	1V , 1kHz	22	nF	±10%, ±5%	0.50	±0.05	±0.05	3.0%		(l)
	C1005X7R273KFTS	C1005X7R273KFT	1V , 1kHz	27	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R333KFTS	C1005X7R333KFT	1V , 1kHz	33	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R473KFTS	C1005X7R473KFT	1V , 1kHz	47	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R563KFTS	C1005X7R563KFT	1V , 1kHz	56	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R683KFTS	C1005X7R683KFT	1V , 1kHz	68	nF	±10%	0.50	±0.05	±0.05	3.5%		(I)
	C1005X7R104KFTS	C1005X7R104KFT	1V , 1kHz	100	nF	±10%	0.50	±0.05	±0.05	10.0%		(II)
-	C1005X7R224KFTS	C1005X7R224KFT	1V , 1kHz	220	nF	±10%	0.50	±0.05	±0.05	10.0%		(II)
	C1005X7R101KETS	C1005X7R101KET	1V , 1kHz	100	pF	±10%	0.50	±0.05	±0.05	5.0%		(l)
16V	C1005X7R121KETS	C1005X7R121KET	1V , 1kHz	120	pF	±10%	0.50	±0.05	±0.05	5.0%	Papar 10Vnss	(l)
100	C1005X7R151KETS C1005X7R181KETS	C1005X7R151KET C1005X7R181KET	1V , 1kHz 1V , 1kHz	150 180	pF pF	±10% ±10%	0.50	±0.05 ±0.05	±0.05 ±0.05	5.0% 5.0%	Paper, 10Kpcs	(l) (l)
	C1005X7R161RE1S	C1005X7R181RE1	1V , 1kHz	220	pF	±10%	0.50	±0.05	±0.05	5.0%		(I)
	01000A1R2Z1RE10	O TOUGATRZZ INE I	IV,IK⊓Z	_ <u>_</u>	рΓ	<b>II</b> 1070	0.30	EU.U3	EU.U3	0.070		(1)

C1005X7R231KETS C1005X7R331KET 1V, 1kHz 300 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R331KET 5 C1005X7R331KET 1V, 1kHz 300 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R471KETS C1005X7R471KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R451KETS C1005X7R451KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 560 pF ±10% 0.50 ±0.05 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 520 pF ±10% 0.50 ±0.05 ±0.05 ±0.05 5.0% C1005X7R451KET C1005X7R451KET 1V, 1kHz 520 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R122KET C1005X7R42KET 1V, 1kHz 1, 10 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R122KET C1005X7R42KET 1V, 1kHz 1, 10 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R122KET C1005X7R42KET 1V, 1kHz 1, 15 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R22KETS C1005X7R42KET 1V, 1kHz 1, 15 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R22KETS C1005X7R22KET 1V, 1kHz 1, 15 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R22KETS C1005X7R22KET 1V, 1kHz 1, 15 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R22KETS C1005X7R32KET 1V, 1kHz 1, 15 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R22KETS C1005X7R32KET 1V, 1kHz 4, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R32KET 1V, 1kHz 4, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R32KET 1V, 1kHz 4, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R32KET 1V, 1kHz 4, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R32KET 1V, 1kHz 4, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R32KET 1V, 1kHz 2, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R33KET 1V, 1kHz 2, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R32KETS C1005X7R33KET 1V, 1kHz 2, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R33KETS C1005X7R33KET 1V, 1kHz 2, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R33KETS C1005X7R33KET 1V, 1kHz 2, 7 pF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R33KETS C1005X7R33KET 1V, 1kHz 2, 7 p	king Spec. (I)
C1005X7R331KETS	(f) (f) (f) (f) (f) (f) (f) (f) (f)
C1005X7R391KETS	(f) (l) (l) (l) (l) (l) (l) (l)
C1005X7R3471KETS	(f) (l) (l) (l) (l) (l) (l)
C1005X7R851KETS	(l) (l) (l) (l) (l) (l) (l)
C1005X7R831KETS	() () () () () () () ()
C1005X7R102KETS	(1) (1) (1) (1)
C1005X7R122KETS	(1) (1) (1)
C1005X7R152KETS	(I) (I) (I)
C1005X7R182KETS	(I) (I)
C1005X7R222KETS	(I)
C1005X7R27ZKETS	
C1005X7R332KETS	(1)
C1005X7R472KETS	(I)
C1005X7R562KETS	(I)
C1005X7R862KETS	<u>(l)</u>
C1005X7R822KETS	10Kpcs (I)
C1005X7R103KETS	(I)
C1005X7R123KETS         C1005X7R123KET         1V, 1kHz         12         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R153KETS         C1005X7R153KET         1V, 1kHz         15         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R183KETS         C1005X7R23KET         1V, 1kHz         18         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R23KETS         C1005X7R273KET         1V, 1kHz         22         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R233KETS         C1005X7R333KET         1V, 1kHz         27         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R393KETS         C1005X7R393KET         1V, 1kHz         33         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R473©ETS         C1005X7R893KET         1V, 1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R693KETS         C1005X7R863KET         1V, 1kHz         47         nF         ±10%         0.50         ±0.05	(1)
C1005X7R183KETS         C1005X7R238KET         1V,1kHz         18         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R223KETS         C1005X7R223KET         1V,1kHz         22         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R233KETS         C1005X7R2333KET         1V,1kHz         27         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R333KETS         C1005X7R333KET         1V,1kHz         33         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R393KETS         C1005X7R393KET         1V,1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R473□ETS         C1005X7R473□ET         1V,1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R683KETS         C1005X7R683KET         1V,1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R683KETS         C1005X7R683KET         1V,1kHz         56         nF         ±10%         0.50         ±0.05         <	(I)
C1005X7R223KETS         C1005X7R223KET         1V,1kHz         22         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R273KETS         C1005X7R273XET         1V,1kHz         27         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R333KETS         C1005X7R333KET         1V,1kHz         33         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R333KETS         C1005X7R333KET         1V,1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R833KETS         C1005X7R8473□ET         1V,1kHz         47         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R63KETS         C1005X7R63KET         1V,1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R683KETS         C1005X7R683KET         1V,1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104□ETS         C1005X7R63KET         1V,1kHz         82         nF         ±10%         0.50         ±0.05	(1)
C1005X7R273KETS         C1005X7R273KET         1V, 1kHz         27         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R333KETS         C1005X7R393KET         1V, 1kHz         33         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R393KETS         C1005X7R393KET         1V, 1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R473□ETS         C1005X7R473□ET         1V, 1kHz         47         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R63KETS         C1005X7R63KET         1V, 1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R63KETS         C1005X7R823KET         1V, 1kHz         68         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R823KETS         C1005X7R823KET         1V, 1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104□ETS         C1005X7R104□ET         1V, 1kHz         10         nF         ±10%         0.50         ±0.05	<u>(l)</u>
C1005X7R333KETS         C1005X7R333KET         1V, 1kHz         33         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R393KETS         C1005X7R473□ET         1V, 1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R473□ET         C1005X7R473□ET         1V, 1kHz         47         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R63KETS         C1005X7R683KET         1V, 1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R683KETS         C1005X7R823KET         1V, 1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R823KETS         C1005X7R823KET         1V, 1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104C□ETS         C1005X7R154KET         1V, 1kHz         100         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R154KETS         C1005X7R154KET         1V, 1kHz         220         nF         ±10%         0.50         ±0.05 </td <td>(1)</td>	(1)
C1005X7R393KETS         C1005X7R393KET         1V, 1kHz         39         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R473□ETS         C1005X7R473□ET         1V, 1kHz         47         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R863KETS         C1005X7R863KET         1V, 1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R823KETS         C1005X7R863KET         1V, 1kHz         68         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R823KETS         C1005X7R823KET         1V, 1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104□ETS         C1005X7R104□ET         1V, 1kHz         100         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R154KETS         C1005X7R154KET         1V, 1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R121KDTS         C1005X7R121KDT         1V, 1kHz         100         pF         ±10%         0.50 <td< td=""><td>(I) (I)</td></td<>	(I) (I)
C1005X7R473□ETS         C1005X7R473□ET         1V,1kHz         47         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R563KETS         C1005X7R563KET         1V,1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R633KETS         C1005X7R863KET         1V,1kHz         68         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104□ETS         C1005X7R104□ET         1V,1kHz         100         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R194EETS         C1005X7R104□ET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R194KETS         C1005X7R194KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R191KDTS         C1005X7R224KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R191KDTS         C1005X7R121KDT         1V,1kHz         100         pF         ±10%         0.50         ±0.05 <td>(1)</td>	(1)
C1005X7R563KETS         C1005X7R563KET         1V,1kHz         56         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R683KETS         C1005X7R883KET         1V,1kHz         68         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R823KETS         C1005X7R823KET         1V,1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104_ETS         C1005X7R104_ETT         1V,1kHz         100         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R154KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R124KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         ±0.05         10.0%           C1005X7R104KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05         ±0.05	(l)
C1005X7R823KETS         C1005X7R823KET         1V,1kHz         82         nF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R104□ETS         C1005X7R104□ET         1V,1kHz         100         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R154KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R124KETS         C1005X7R224KET         1V,1kHz         220         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R101KDTS         C1005X7R101KDT         1V,1kHz         100         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R121KDTS         C1005X7R121KDT         1V,1kHz         120         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V,1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R21KDTS         C1005X7R21KDT         1V,1kHz         180         pF         ±10%         0.50         ±0.05 <td>(I)</td>	(I)
C1005X7R104□ETS         C1005X7R104□ET         1V,1kHz         100         nF         ±10%,±20%         0.50         ±0.05         ±0.05         5.0%           C1005X7R154KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R224KETS         C1005X7R224KET         1V,1kHz         220         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R101KDTS         C1005X7R101KDT         1V,1kHz         100         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R121KDTS         C1005X7R121KDT         1V,1kHz         120         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R151KDTS         C1005X7R151KDT         1V,1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R151KDT         1V,1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R21KDTS         C1005X7R21KDT         1V,1kHz         220         pF         ±10%         0.50         ±0.05 <td>(I)</td>	(I)
C1005X7R154KETS         C1005X7R154KET         1V,1kHz         150         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R224KETS         C1005X7R224KET         1V,1kHz         220         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R101KDTS         C1005X7R101KDT         1V,1kHz         100         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R121KDTS         C1005X7R121KDT         1V,1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R151KDTS         C1005X7R151KDT         1V,1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V,1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R21KDTS         C1005X7R221KDT         1V,1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R21KDTS         C1005X7R271KDT         1V,1kHz         220         pF         ±10%         0.50         ±0.05	(I)
C1005X7R224KETS         C1005X7R224KET         1V,1kHz         220         nF         ±10%         0.50         ±0.05         ±0.05         10.0%           C1005X7R101KDTS         C1005X7R101KDT         1V,1kHz         100         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R121KDTS         C1005X7R121KDT         1V,1kHz         120         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R151KDTS         C1005X7R151KDT         1V,1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V,1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R221KDTS         C1005X7R221KDT         1V,1kHz         220         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R271KDTS         C1005X7R271KDT         1V,1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V,1kHz         330         pF         ±10%         0.50         ±0.05	(l)
C1005X7R101KDTS         C1005X7R101KDT         1V, 1kHz         100         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R121KDTS         C1005X7R121KDT         1V, 1kHz         120         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R151KDTS         C1005X7R151KDT         1V, 1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V, 1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R221KDTS         C1005X7R221KDT         1V, 1kHz         220         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R271KDTS         C1005X7R271KDT         1V, 1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V, 1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V, 1kHz         390         pF         ±10%         0.50         ±0.05	(II)
C1005X7R121KDTS         C1005X7R121KDT         1V, 1kHz         120         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R151KDTS         C1005X7R151KDT         1V, 1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V, 1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R221KDTS         C1005X7R221KDT         1V, 1kHz         220         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R271KDTS         C1005X7R271KDT         1V, 1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V, 1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V, 1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V, 1kHz         470         pF         ±10%         0.50         ±0.05<	(II)
C1005X7R151KDTS         C1005X7R151KDT         1V, 1kHz         150         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R181KDTS         C1005X7R181KDT         1V, 1kHz         180         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R221KDTS         C1005X7R221KDT         1V, 1kHz         220         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R271KDTS         C1005X7R371KDT         1V, 1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V, 1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V, 1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R4747KDTS         C1005X7R391KDT         1V, 1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V, 1kHz         560         pF         ±10%         0.50         ±0.05	(1)
C1005X7R221KDTS         C1005X7R221KDT         1V,1kHz         220         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R271KDTS         C1005X7R271KDT         1V,1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V,1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V,1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R471KDTS         C1005X7R471KDT         1V,1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	(I)
C1005X7R271KDTS         C1005X7R271KDT         1V,1kHz         270         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R331KDTS         C1005X7R331KDT         1V,1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V,1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R471KDTS         C1005X7R471KDT         1V,1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	(I)
C1005X7R331KDTS         C1005X7R331KDT         1V,1kHz         330         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R391KDTS         C1005X7R391KDT         1V,1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R471KDTS         C1005X7R471KDT         1V,1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	(I)
C1005X7R391KDTS         C1005X7R391KDT         1V,1kHz         390         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R471KDTS         C1005X7R471KDT         1V,1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	<u>(l)</u>
C1005X7R471KDTS         C1005X7R471KDT         1V,1kHz         470         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	(1)
C1005X7R561KDTS         C1005X7R561KDT         1V,1kHz         560         pF         ±10%         0.50         ±0.05         ±0.05         5.0%           C1005X7R681KDTS         C1005X7R681KDT         1V,1kHz         680         pF         ±10%         0.50         ±0.05         ±0.05         5.0%	(I) (I)
C1005X7R681KDTS C1005X7R681KDT 1V,1kHz 680 pF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
	(I)
C1005X7R821KDTS C1005X7R821KDT 1V ,1kHz 820 pF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R102KDTS C1005X7R102KDT 1V,1kHz 1.0 nF ±10% 0.50 ±0.05 ±0.05 5.0%	<u>(l)</u>
C1005X7R122KDTS C1005X7R122KDT 1V,1kHz 1.2 nF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R152KDTS C1005X7R152KDT 1V,1kHz 1.5 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R132KDTS C1005X7R132KDT 1V,1kHz 1.8 nF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R182KDTS C1005X7R182KDT 1V,1kHz 1.8 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I) (I)
C1005X7R222KDTS C1005X7R222KDT 1V 1kHz 1.3 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(1)
C1005X7R272KDTS C1005X7R272KDT 1V,1kHz 2.7 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R332KDTS C1005X7R332KDT 1V , 1kHz 3.3 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
	10Kpcs (l)
C1005X7R472KDTS C1005X7R472KDT 1V,1kHz 4.7 nF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R562KDTS C1005X7R562KDT 1V,1kHz 5.6 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(1)
C1005X7R562KDTS C1005X7R562KDT 1V,1kHz 5.6 nF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R682KDTS C1005X7R682KDT 1V,1kHz 6.8 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I) (I)
C1005X7R002RDTS C1005X7R002RDT 1V, 1RHz 8.2 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(1)
C1005X7R103KDTS C1005X7R103KDT 1V,1kHz 10 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R123KDTS C1005X7R123KDT 1V , 1kHz 12 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R153KDTS C1005X7R153KDT 1V,1kHz 15 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R183KDTS C1005X7R183KDT 1V,1kHz 18 nF ±10% 0.50 ±0.05 ±0.05 5.0%	
C1005X7R223KDTS C1005X7R223KDT 1V ,1kHz 22 nF ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R273KDTS C1005X7R273KDT 1V ,1kHz 27 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(I)
C1005X7R273RDTS C1005X7R273RDT TV, TRHZ 27 TIP ±10% 0.50 ±0.05 ±0.05 5.0% C1005X7R333KDTS C1005X7R333KDT 1V, TRHZ 33 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(l) (l)
C1005X7R393KDTS C1005X7R393KDT 1V,1kHz 39 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(l) (l)
C1005X7R473KDTS C1005X7R473KDT 1V , 1kHz 47 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(l) (l)
C1005X7R563KDTS C1005X7R563KDT 1V , 1kHz 56 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(l) (l) (l) (l) (l)
C1005X7R683KDTS C1005X7R683KDT 1V,1kHz 68 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(l) (l) (l) (l) (l) (l)
C1005X7R823KDTS C1005X7R823KDT 1V,1kHz 82 nF ±10% 0.50 ±0.05 ±0.05 5.0%	() () () () () () () () ()
C1005X7R104_DTS C1005X7R104_DT 1V ,1kHz 100 nF ±10%, ±5% 0.50 ±0.05 ±0.05 5.0% C1005X7R224KDTS C1005X7R224KDT 1V ,1kHz 220 nF ±10% 0.50 ±0.05 ±0.05 10.0%	(f) (l) (l) (l) (l) (l) (l) (l)
C1005X7R424RDTS C1005X7R424RDT 1V,1RHZ 220 1IF ±10% 0.50 ±0.05 ±0.05 10.0% C1005X7R474KDTS C1005X7R474KDT 1V,1RHZ 470 nF ±10% 0.50 ±0.05 ±0.05 10.0%	(f) (l) (l) (l) (l) (l) (l) (l) (l)
C1005X7R103KCTS C1005X7R103KCT 1V , 1kHz 10 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(f) (l) (l) (l) (l) (l) (l) (l)
6.3V C1005X7R473KCTS C1005X7R473KCT 1V,1kHz 47 nF ±10% 0.50 ±0.05 ±0.05 5.0%	(f) (l) (l) (l) (l) (l) (l) (l) (l)
C1005X/R104RC1S C1005X/R104RC1 1V,1RHZ 100 NF ±10% 0.50 ±0.05 ±0.05 5.0%	(f) (f) (f) (f) (f) (f) (f) (f) (f) (f)
C1005X7R474_CTS C1005X7R474_CT 1V,1kHz 470 nF ±10%,±20% 0.50 ±0.05 ±0.05 10.0%	(f) (f) (f) (f) (f) (f) (f) (f) (f) (f)

 $<sup>\</sup>Box$  Tolerance Code: J=±5%, K=±10%, M=±20%.

### • C1608X7R Series (EIA0603)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci		Available Tolerance	Thick.	Toleran	ce(mm)	DF	Standard	Test
			Condition	Value			(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1608X7R101KGTS	C1608X7R101KGT	1V , 1kHz	100	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R121KGTS	C1608X7R121KGT	1V , 1kHz	120	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R151KGTS C1608X7R181KGTS	C1608X7R151KGT C1608X7R181KGT	1V , 1kHz 1V , 1kHz	150 180	pF pF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	2.5%		(l) (l)
	C1608X7R181KGTS	C1608X7R181KGT	1V , 1kHz	220	рF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R271KGTS	C1608X7R271KGT	1V , 1kHz	270	pF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R331KGTS	C1608X7R331KGT	1V , 1kHz	330	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R391KGTS	C1608X7R391KGT	1V , 1kHz	390	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R471KGTS	C1608X7R471KGT	1V , 1kHz	470	рF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R561KGTS	C1608X7R561KGT	1V , 1kHz	560	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R681KGTS	C1608X7R681KGT	1V , 1kHz	680	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R821KGTS	C1608X7R821KGT	1V , 1kHz	820	pF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R102KGTS C1608X7R122KGTS	C1608X7R102KGT C1608X7R122KGT	1V , 1kHz 1V , 1kHz	1.0	nF nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	2.5%		(l) (l)
	C1608X7R152KGTS	C1608X7R152KGT	1V , 1kHz	1.5	nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10	2.5%		(I)
	C1608X7R182KGTS	C1608X7R182KGT	1V , 1kHz	1.8	nF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R202KGTS	C1608X7R202KGT	1V , 1kHz	2.0	nF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R222KGTS	C1608X7R222KGT	1V , 1kHz	2.2	nF	±10%	0.80	±0.10	±0.10	2.5%		(1)
	C1608X7R272KGTS	C1608X7R272KGT	1V , 1kHz	2.7	nF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R332KGTS	C1608X7R332KGT	1V , 1kHz	3.3	nF	±10%	0.80	±0.10	±0.10	2.5%		(I)
50V	C1608X7R392KGTS	C1608X7R392KGT	1V , 1kHz	3.9	nF	±10%	0.80	±0.10	±0.10	2.5%	Paper, 4Kpcs	(l)
	C1608X7R472KGTS	C1608X7R472KGT	1V , 1kHz	4.7	nF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R562KGTS C1608X7R682KGTS	C1608X7R562KGT C1608X7R682KGT	1V , 1kHz 1V , 1kHz	5.6 6.8	nF nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	2.5%		(l) (l)
	C1608X7R822KGTS	C1608X7R822KGT	1V , 1kHz	8.2	nF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R103□GTS	C1608X7R103 GT	1V, 1kHz	10	nF	±10%,±5%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R123KGTS	C1608X7R123KGT	1V , 1kHz	12	nF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R153KGTS	C1608X7R153KGT	1V , 1kHz	15	nF	±10%	0.80	±0.10	±0.10	2.5%		(I)
	C1608X7R183_GTS	C1608X7R183 GT	1V , 1kHz	18	nF	±10%,±5%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R223KGTS	C1608X7R223KGT	1V , 1kHz	22	nF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R273KGTS	C1608X7R273KGT	1V , 1kHz	27	nF	±10%	0.80	±0.10	±0.10	2.5%		(l)
	C1608X7R333KGTS	C1608X7R333KGT	1V , 1kHz	33	nF	±10%	0.80	±0.15	±0.15	2.5%		(I)
	C1608X7R393KGTS	C1608X7R393KGT	1V , 1kHz	39	nF	±10%	0.80	±0.15	±0.15	2.5%		(l)
	C1608X7R473KGTS	C1608X7R473KGT	1V , 1kHz	47	nF nF	±10%	0.80	±0.15	±0.15 ±0.15	3.0%		(l)
	C1608X7R563KGTS C1608X7R683KGTS	C1608X7R563KGT C1608X7R683KGT	1V , 1kHz 1V , 1kHz	56 68	nF	±10% ±10%	0.80	±0.15 ±0.15	±0.15	3.0%		(l) (l)
	C1608X7R823KGTS	C1608X7R823KGT	1V , 1kHz	82	nF	±10%	0.80	±0.15	±0.15	3.0%		(I)
	C1608X7R104KGTS	C1608X7R104KGT	1V , 1kHz	100	nF	±10%	0.80	±0.15	±0.15	3.0%		(II)
	C1608X7R224KGTS	C1608X7R224KGT	1V , 1kHz	220	nF	±10%	0.80	±0.15	±0.15	3.5%		(II)
	C1608X7R474KGTS	C1608X7R474KGT	1V , 1kHz	470	nF	±10%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X7R105KGTS	C1608X7R105KGT	1V , 1kHz	1.0	uF	±10%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X7R474KNTS	C1608X7R474KNT	1V , 1kHz	470	nF	±10%	0.80	±0.15	±0.15	10.0%	Paper, 4Kpcs	(II)
35V	C1608X7R105KNTS	C1608X7R105KNT	1V , 1kHz	1.0	uF	±10%	0.80	±0.20	±0.20	10.0%	т арог, тероо	(II)
	C1608X7R101KFTS	C1608X7R101KFT	1V , 1kHz	100	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R121KFTS	C1608X7R121KFT	1V , 1kHz	120	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R151KFTS	C1608X7R151KFT	1V , 1kHz	150	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R181KFTS	C1608X7R181KFT	1V , 1kHz	180	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R221KFTS	C1608X7R221KFT	1V , 1kHz	220	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R271KFTS	C1608X7R271KFT	1V , 1kHz	270	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R331KFTS	C1608X7R331KFT	1V , 1kHz	330	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R391KFTS	C1608X7R391KFT	1V , 1kHz	390	pF	±10%	0.80	±0.10	±0.10	3.5%		(1)
	C1608X7R471KFTS	C1608X7R471KFT	1V , 1kHz	470	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R561KFTS	C1608X7R561KFT	1V , 1kHz	560	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R681KFTS	C1608X7R681KFT	1V , 1kHz	680	pF	±10%	0.80	±0.10	±0.10	3.5%		(l)
251/	C1608X7R821KFTS	C1608X7R821KFT	1V , 1kHz	820	pF	±10%	0.80	±0.10	±0.10	3.5%	Papar 4Vaca	(l)
25V	C1608X7R102KFTS	C1608X7R102KFT	1V , 1kHz	1.0	nF	±10%	0.80	±0.10	±0.10	3.5%	Paper, 4Kpcs	(l)
	C1608X7R122KFTS	C1608X7R122KFT C1608X7R152KFT	1V , 1kHz	1.2	nF	±10%	0.80	±0.10	±0.10	3.5%		(l)
	C1608X7R152KFTS C1608X7R182KFTS	C1608X7R152KFT	1V , 1kHz 1V , 1kHz	1.5 1.8	nF nF	±10% ±10%	0.80	±0.10	±0.10	3.5%		(l) (l)
	C1608X7R182KFTS	C1608X7R182KFT	1V , 1kHz	2.2	nF	±10%	0.80	±0.10	±0.10	3.5%		
	C1608X7R272KFTS	C1608X7R2Z2KFT	1V , 1kHz	2.7	nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	3.5%		(l) (l)
	C1608X7R332KFTS	C1608X7R332KFT	1V , 1kHz	3.3	nF		0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R392KFTS	C1608X7R332KFT	1V , 1kHz	3.9	nF	±10% ±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R472KFTS	C1608X7R472KFT	1V , 1kHz	4.7	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R562KFTS	C1608X7R562KFT	1V , 1kHz	5.6	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R682KFTS	C1608X7R682KFT	1V, 1kHz	6.8	nF	±10%	0.80	±0.10	±0.10	3.5%		(1)
	C1608X7R822KFTS	C1608X7R822KFT	1V , 1kHz	8.2	nF	±10%	0.80	±0.10	±0.10	3.5%		(1)
	C1608X7R822KFTS	C1608X7R822KF1	1V , 1kHz	10	nF	±10% ±10%	0.80	±0.10	±0.10	3.5%		(I)
	O TOUGHT NOONE TO	O TOUGA / INTUSINE I	I IV,IK⊓∠	10	L HI	IIU/0	0.00	±0.10	±0.10	J.J /0		(1)

 $<sup>\</sup>hfill\Box$  Tolerance Code: J=±5%, K=±10%, M=±20%; Special tolerance on the request.

			Measuring	Capaci	tance		Thick.	Toleran	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value		Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1608X7R123KFTS	C1608X7R123KFT	1V , 1kHz	12	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R153KFTS	C1608X7R153KFT	1V , 1kHz	15	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R183KFTS	C1608X7R183KFT	1V , 1kHz	18	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R223_FTS	C1608X7R223_FT	1V , 1kHz	22	nF	±10%,±5%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R273 FTS	C1608X7R273 FT	1V , 1kHz	27	nF	±10%,±5%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R333KFTS	C1608X7R333KFT	1V , 1kHz	33	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R393KFTS	C1608X7R393KFT	1V , 1kHz	39	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R473KFTS	C1608X7R473KFT	1V , 1kHz	47	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R563KFTS	C1608X7R563KFT	1V , 1kHz	56	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
25V	C1608X7R683KFTS	C1608X7R683KFT	1V , 1kHz	68	nF	±10%	0.80	±0.10	±0.10	3.5%	Paper, 4Kpcs	(I)
	C1608X7R823KFTS	C1608X7R823KFT	1V , 1kHz	82	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R104KFTS	C1608X7R104KFT	1V , 1kHz	100	nF	±10%	0.80	±0.10	±0.10	3.5%		(I)
	C1608X7R124KFTS	C1608X7R124KFT	1V , 1kHz	120	nF	±10%	0.80	±0.15	±0.15	3.5%		(I)
	C1608X7R154KFTS	C1608X7R154KFT	1V , 1kHz	150	nF	±10%	0.80	±0.15	±0.15	3.5%		(I)
	C1608X7R184KFTS	C1608X7R184KFT	1V , 1kHz	180	nF	±10%	0.80	±0.15	±0.15	3.5%		(I)
	C1608X7R224KFTS	C1608X7R224KFT	1V , 1kHz	220	nF	±10%	0.80	±0.15	±0.15	3.5%		(I)
	C1608X7R334KFTS	C1608X7R334KFT	1V , 1kHz	330	nF	±10%	0.80	±0.15	±0.15	7.0%		(I)
	C1608X7R474KFTS	C1608X7R474KFT	1V , 1kHz	470	nF	±10%	0.80	±0.15	±0.15	10.0%		(I)
	C1608X7R105KFTS	C1608X7R105KFT	1V , 1kHz	1.0	иF	±10%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X7R101KETS	C1608X7R101KET	1V , 1kHz	100	pF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R121KETS	C1608X7R121KET	1V , 1kHz	120	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R151KETS	C1608X7R151KET	1V , 1kHz	150	рF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R181KETS	C1608X7R181KET	1V , 1kHz	180	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R221KETS	C1608X7R221KET	1V , 1kHz	220	pF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R271KETS	C1608X7R271KET	1V , 1kHz	270	pF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R331KETS	C1608X7R331KET	1V , 1kHz	330	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R391KETS	C1608X7R391KET	1V , 1kHz 1V , 1kHz	390 470	pF pF	±10%	0.80	±0.10 ±0.10	±0.10	5.0%		(l)
	C1608X7R471KETS C1608X7R561KETS	C1608X7R471KET C1608X7R561KET	1V , 1kHz	560	pF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	5.0%		(l) (l)
	C1608X7R681KETS	C1608X7R681KET	1V , 1kHz	680	рF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R821KETS	C1608X7R821KET	1V , 1kHz	820	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R102KETS	C1608X7R102KET	1V , 1kHz	1.0	nF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R122KETS	C1608X7R122KET	1V , 1kHz	1.2	nF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R152KETS	C1608X7R152KET	1V , 1kHz	1.5	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R182KETS	C1608X7R182KET	1V , 1kHz	1.8	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R222KETS	C1608X7R222KET	1V , 1kHz	2.2	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R272KETS	C1608X7R272KET	1V , 1kHz	2.7	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R332KETS	C1608X7R332KET	1V , 1kHz	3.3	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R392KETS	C1608X7R392KET	1V , 1kHz	3.9	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R472KETS C1608X7R562KETS	C1608X7R472KET C1608X7R562KET	1V , 1kHz 1V , 1kHz	4.7 5.6	nF nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	5.0%		(l) (l)
16V	C1608X7R502RETS	C1608X7R582KET	1V , 1kHz	6.8	nF	±10%	0.80	±0.10	±0.10	5.0%	Paper, 4Kpcs	(I)
100	C1608X7R822KETS	C1608X7R822KET	1V , 1kHz	8.2	nF	±10%	0.80	±0.10	±0.10	5.0%	rapel, 4Npcs	(I)
	C1608X7R103KETS	C1608X7R103KET	1V , 1kHz	10	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R123KETS	C1608X7R123KET	1V , 1kHz	12	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R153KETS	C1608X7R153KET	1V , 1kHz	15	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R183KETS	C1608X7R183KET	1V , 1kHz	18	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R223KETS	C1608X7R223KET	1V , 1kHz	22	nF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R273KETS	C1608X7R273KET	1V , 1kHz	27	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R333KETS	C1608X7R333KET	1V , 1kHz	33	nF	±10%	0.80	±0.10	±0.10	5.0%		(1)
	C1608X7R393KETS	C1608X7R393KET	1V , 1kHz	39	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R473KETS C1608X7R563KETS	C1608X7R473KET C1608X7R563KET	1V , 1kHz 1V , 1kHz	47 56	nF nF	±10% ±10%	0.80	±0.10 ±0.10	±0.10 ±0.10	5.0%		(l) (l)
	C1608X7R683KETS	C1608X7R683KET	1V , 1kHz	68	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R823KETS	C1608X7R823KET	1V , 1kHz	82	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R104KETS	C1608X7R104KET	1V , 1kHz	100	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R154KETS	C1608X7R154KET	1V , 1kHz	150	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R184KETS	C1608X7R184KET	1V , 1kHz	180	nF	±10%	0.80	±0.15	±0.15	5.0%		(1)
	C1608X7R224KETS	C1608X7R224KET	1V , 1kHz	220	nF	±10%	0.80	±0.15	±0.15	5.0%		(l)
	C1608X7R334KETS	C1608X7R334KET	1V , 1kHz	330	nF	±10%	0.80	±0.15	±0.15	5.0%		(l)
	C1608X7R474KETS	C1608X7R474KET	1V , 1kHz	470	nF	±10%	0.80	±0.15	±0.15	5.0%		(l)
	C1608X7R684KETS	C1608X7R684KET	1V , 1kHz	680	nF	±10%	0.80	±0.15	±0.15	10.0%		(1)
	C1608X7R105_ETS	C1608X7R105_ET	1V , 1kHz	1.0	uF	±10%, ±20%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X7R225KETS	C1608X7R225KET	1V , 1kHz	2.2	uF	±10%	0.80	±0.20	±0.20	10.0%		(II)

51/	DADEOUBAL	D 4 D 5 O 11 D 71 I O	Measuring	Capaci	tance		Thick.	Toleran	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C1608X7R101KDTS	C1608X7R101KDT	1V,1kHz	100	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R121KDTS	C1608X7R121KDT	1V , 1kHz	120	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R151KDTS	C1608X7R151KDT	1V , 1kHz	150	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R181KDTS	C1608X7R181KDT	1V , 1kHz	180	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R221KDTS	C1608X7R221KDT	1V , 1kHz	220	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R271KDTS	C1608X7R271KDT	1V , 1kHz	270	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R331KDTS	C1608X7R331KDT	1V , 1kHz	330	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R391KDTS	C1608X7R391KDT	1V , 1kHz	390	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R471KDTS	C1608X7R471KDT	1V , 1kHz	470	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R561KDTS	C1608X7R561KDT	1V , 1kHz	560	pF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R681KDTS	C1608X7R681KDT	1V, 1kHz	680	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R821KDTS	C1608X7R821KDT	1V , 1kHz	820	pF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R102KDTS	C1608X7R102KDT	1V , 1kHz	1.0	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R122KDTS	C1608X7R122KDT	1V , 1kHz	1.2	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R152KDTS	C1608X7R152KDT	1V , 1kHz	1.5	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R182KDTS	C1608X7R182KDT	1V , 1kHz	1.8	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R222KDTS	C1608X7R222KDT	1V , 1kHz	2.2	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R272KDTS	C1608X7R272KDT	1V , 1kHz	2.7	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R332KDTS	C1608X7R332KDT	1V , 1kHz	3.3	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R392KDTS	C1608X7R392KDT	1V , 1kHz	3.9	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R472KDTS	C1608X7R472KDT	1V , 1kHz	4.7	nF	±10%	0.80	±0.10	±0.10	5.0%		(1)
10V	C1608X7R562KDTS	C1608X7R562KDT	1V , 1kHz	5.6	nF	±10%	0.80	±0.10	±0.10	5.0%	Paper, 4Kpcs	(I)
	C1608X7R682KDTS	C1608X7R682KDT	1V , 1kHz	6.8	nF	±10%	0.80	±0.10	±0.10	5.0%	. , .	(I)
	C1608X7R822KDTS	C1608X7R822KDT	1V , 1kHz	8.2	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R103KDTS	C1608X7R103KDT	1V , 1kHz	10	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R123KDTS	C1608X7R123KDT	1V , 1kHz	12	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R153KDTS	C1608X7R153KDT	1V , 1kHz	15	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R183KDTS	C1608X7R183KDT	1V , 1kHz	18	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R223KDTS	C1608X7R223KDT	1V , 1kHz	22	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R273KDTS	C1608X7R273KDT	1V , 1kHz	27	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R333KDTS	C1608X7R333KDT	1V , 1kHz	33	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R393KDTS	C1608X7R393KDT	1V , 1kHz	39	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R473KDTS	C1608X7R473KDT	1V , 1kHz	47	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R563KDTS	C1608X7R563KDT	1V , 1kHz	56	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R683KDTS	C1608X7R683KDT	1V , 1kHz	68	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R823KDTS	C1608X7R823KDT	1V, 1kHz	82	nF	±10%	0.80	±0.10	±0.10	5.0%		(I)
	C1608X7R104KDTS	C1608X7R104KDT	1V , 1kHz	100	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R224KDTS	C1608X7R224KDT	1V , 1kHz	220	nF	±10%	0.80	±0.15	±0.15	5.0%		(1)
	C1608X7R334KDTS	C1608X7R334KDT	1V , 1kHz	330	nF	±10%	0.80	±0.15	±0.15	10.0%		(1)
	C1608X7R474KDTS	C1608X7R474KDT	1V , 1kHz	470	nF	±10%	0.80	±0.15	±0.15	10.0%		(l)
	C1608X7R684KDTS	C1608X7R684KDT	1V , 1kHz	680	nF	±10%	0.80	±0.15	±0.15	10.0%		(l)
	C1608X7R105KDTS	C1608X7R105KDT	1V , 1kHz	1.0	uF	±10%	0.80	±0.15	±0.15	10.0%		(II)
	C1608X7R225KDTS	C1608X7R225KDT	1V , 1kHz	2.2	uF	±10%	0.80	±0.15	±0.10	10.0%		(II)
	C1608X7R104KCTS	C1608X7R104KCT	1V , 1kHz	100	nF	±10%	0.80	±0.10	±0.10	5.0%		(l)
	C1608X7R105KCTS	C1608X7R105KCT	1V , 1kHz	1.0	uF	±10%	0.80	±0.15	±0.15	10.0%		(II)
6.3V	C1608X7R225KCTS	C1608X7R225KCT	1V , 1kHz	2.2	uF	±10%	0.80	±0.15	±0.10	10.0%	Paper, 4Kpcs	(II)
	C1608X7R475KCTS	C1608X7R475KCT	1V , 1kHz	4.7	uF	±10%	0.80	±0.20	±0.20	10.0%		(II)
	C1608X7R106MCTS	C1608X7R106MCT	0.5V , 1kHz	10	uF	±20%	0.80	±0.20	±0.20	10.0%		(II)*

 $<sup>\</sup>hfill\Box$  Tolerance Code: J=±5%, K=±10%, M=±20%; Special tolerance on the request.

## • C2012X7R Series (EIA0805)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci	tance	Available Tolerance	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C2012X7R101KGTS	C2012X7R101KGT	1V , 1kHz	100	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R151KGTSC	000000000000000000000000000000000000000	1V , 1kHz	150	pF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R151KGTS	C2012X7R151KGT	1V , 1kHz	150	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R181KGTSC C2012X7R181KGTS	C2012X7R181KGT	1V , 1kHz 1V , 1kHz	180 180	pF pF	±10% ±10%	0.60 0.85	±0.15 ±0.15	±0.15 ±0.15	2.5%		(l) (l)
	C2012X7R161RG1S	CZUIZA/KIBIKGI	1V , 1kHz	220	pF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R221KGTS	C2012X7R221KGT	1V , 1kHz	220	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R271KGTSC		1V , 1kHz	270	pF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R271KGTS	C2012X7R271KGT	1V , 1kHz	270	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R331KGTSC		1V , 1kHz	330	pF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R331KGTS	C2012X7R331KGT	1V , 1kHz	330	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R391KGTSC C2012X7R391KGTS	COOLOVZDOOLICCT	1V , 1kHz	390	pF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R391KGTS C2012X7R471KGTSC	C2012X7R391KGT	1V , 1kHz 1V , 1kHz	390 470	pF pF	±10% ±10%	0.85	±0.15 ±0.15	±0.15 ±0.15	2.5%		(l) (l)
	C2012X7R471KGTS	C2012X7R471KGT	1V , 1kHz	470	pF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R561KGTSC	02012/((((((((((((((((((((((((((((((((((	1V , 1kHz	560	pF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R561KGTS	C2012X7R561KGT	1V , 1kHz	560	pF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R681KGTSC		1V , 1kHz	680	pF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R681KGTS	C2012X7R681KGT	1V , 1kHz	680	pF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R821KGTSC	000101/700011/07	1V , 1kHz	820	pF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R821KGTS C2012X7R102KGTSC	C2012X7R821KGT	1V , 1kHz 1V , 1kHz	820 1.0	pF nF	±10% ±10%	0.85	±0.15 ±0.15	±0.15 ±0.15	2.5%	Paper, 4Kpcs	(l) (l)
	C2012X7R102KGTS	C2012X7R102KGT	1V , 1kHz	1.0	nF	±10%	0.85	±0.15 ±0.15	±0.15	2.5%	rapel, 4Npcs	(I)
	C2012X7R122KGTSC	OZO1ZX/TKTOZKOT	1V , 1kHz	1.2	nF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R122KGTS	C2012X7R122KGT	1V , 1kHz	1.2	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R152KGTSC		1V , 1kHz	1.5	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R152KGTS	C2012X7R152KGT	1V , 1kHz	1.5	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R182KGTSC		1V , 1kHz	1.8	nF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R182KGTS	C2012X7R182KGT	1V , 1kHz	1.8	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R222KGTSC C2012X7R222KGTS	COMMONTE	1V , 1kHz	2.2	nF nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R222KGTSC	C2012X7R222KGT	1V , 1kHz 1V , 1kHz	2.2	nF	±10% ±10%	0.85	±0.15 ±0.15	±0.15 ±0.15	2.5%		(l) (l)
	C2012X7R272KGTS	C2012X7R272KGT	1V , 1kHz	2.7	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R332KGTSC	020127(11)2121(01	1V , 1kHz	3.3	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R332KGTS	C2012X7R332KGT	1V , 1kHz	3.3	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R392KGTSC		1V , 1kHz	3.9	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R392KGTS	C2012X7R392KGT	1V , 1kHz	3.9	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
50V	C2012X7R472KGTSC	00040775470707	1V , 1kHz	4.7	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
30 V	C2012X7R472KGTS	C2012X7R472KGT	1V , 1kHz 1V , 1kHz	4.7	nF nF	±10%	0.85	±0.15	±0.15 ±0.15	2.5%		(l)
	C2012X7R562KGTSC C2012X7R562KGTS	C2012X7R562KGT	1V , 1kHz	5.6 5.6	nF	±10% ±10%	0.85	±0.15 ±0.15	±0.15	2.5%		(l) (l)
	C2012X7R682KGTSC	C2012X/1\302\\G1	1V , 1kHz	6.8	nF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R682KGTS	C2012X7R682KGT	1V , 1kHz	6.8	nF	±10%	0.80	±0.15	±0.15	2.5%		(I)
	C2012X7R682KGPSG		1V , 1kHz	6.8	nF	±10%	1.25	±0.15	±0.20	2.5%	Embossed, 3Kpcs	(l)
	C2012X7R822KGTSC		1V , 1kHz	8.2	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R822KGTS	C2012X7R822KGT	1V , 1kHz	8.2	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R103KGTSC	00040V7D400V0T	1V , 1kHz	10	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R103KGTS C2012X7R123KGTSC	C2012X7R103KGT	1V , 1kHz 1V , 1kHz	10 12	nF nF	±10% ±10%	0.85	±0.15	±0.15	2.5%		(l) (l)
	C2012X7R123KGTS	C2012X7R123KGT	1V , 1kHz	12	nF	±10%	0.85	±0.15 ±0.15	±0.15 ±0.15	2.5%		(I)
	C2012X7R153KGTSC	OZOTZXTRTZSROT	1V , 1kHz	15	nF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R153KGTS	C2012X7R153KGT	1V , 1kHz	15	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R183KGTSC		1V,1kHz	18	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R183KGTS	C2012X7R183KGT	1V , 1kHz	18	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R223KGTSC	000401/700551/2=	1V , 1kHz	22	nF	±10%	0.60	±0.15	±0.15	2.5%		(l)
	C2012X7R223KGTSD	C2012X7R223KGT	1V , 1kHz	22	nF nF	±10%	0.80	±0.15	±0.15	2.5%	Papar 41/nas	(l)
	C2012X7R273KGTSC C2012X7R273KGTS	C2012X7R273KGT	1V , 1kHz 1V , 1kHz	27 27	nF	±10% ±10%	0.60	±0.15 ±0.15	±0.15 ±0.15	2.5%	Paper, 4Kpcs	(l) (l)
	C2012X7R273RGTS C2012X7R333KGTSC	OZU IZA I NZI SNO I	1V , 1kHz	33	nF	±10%	0.60	±0.15 ±0.15	±0.15	2.5%		(I)
	C2012X7R333KGTS	C2012X7R333KGT	1V , 1kHz	33	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R393KGTSC		1V , 1kHz	39	nF	±10%	0.60	±0.15	±0.15	2.5%		(I)
	C2012X7R393KGTS	C2012X7R393KGT	1V , 1kHz	39	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R473KGTS	C2012X7R473KGT	1V , 1kHz	47	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R563KGTS	C2012X7R563KGT	1V , 1kHz	56	nF	±10%	0.85	±0.15	±0.15	2.5%		(I)
	C2012X7R683KGTS	C2012X7R683KGT	1V , 1kHz	68	nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R823KGTS C2012X7R104 GTSD	C2012X7R823KGT	1V , 1kHz 1V , 1kHz	82 100	nF nF	±10%	0.85	±0.15	±0.15	2.5%		(l)
	C2012X7R104GTSD	C2012X7R124KGT	1V , 1kHz	120	nF	±10%,±5% ±10%	0.80	±0.15 ±0.15	±0.10 ±0.15	2.5%		(l) (l)
	C2012X7R124KGTS	C2012X7R124KGT	1V , 1kHz	150	nF	±10% ±10%	0.85	±0.15 ±0.15	±0.15	2.5%		(I)
	C2012X7R184KGPSG	52012/////ICIOTICOT	1V , 1kHz	180	nF	±10%	1.25	±0.15	±0.13	3.0%	Embossed, 3Kpcs	(I)
	C2012X7R224KGTS	C2012X7R224KGT	1V , 1kHz	220	nF	±10%	0.85	±0.15	±0.15	3.0%	Paper, 4Kpcs	(I)
	C2012X7R224KGPS	C2012X7R224KGP	1V , 1kHz	220	nF	±10%	1.25	±0.15	±0.20	3.0%		(l)
	C2012X7R334KGPS	C2012X7R334KGP	1V , 1kHz	330	nF	±10%	1.25	±0.15	±0.20	3.0%		(l)
	C2012X7R474KGPS	C2012X7R474KGP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	3.5%	Embossed, 3Kpcs	(l)
	C2012X7R105KGPSG	C2012X7R105KGP	1V , 1kHz	1.0	uF	±10%	1.25	±0.15	±0.20	10.0%		(II)
1	C2012X7R225KGPSG	C2012X7R225KGP	1V , 1kHz	2.2	uF	±10%	1.25	±0.20	±0.20	10.0%		(II)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capaci		Available Tolerance	Thick.	Tolerand	_ `	DF	Standard	Test
			Condition	Value	Unit		(mm)	L/W	Thick.	(max.)	Packing	Spec.
35V	C2012X7R474KNPS	C2012X7R474KNP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	3.5%	Embossed, 3Kpcs	(l)
	C2012X7R102KFTSC		1V , 1kHz	1.0	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R102KFTS	C2012X7R102KFT	1V , 1kHz	1.0	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R122KFTSC	00040\/75400\/FT	1V , 1kHz	1.2	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R122KFTS	C2012X7R122KFT	1V , 1kHz	1.2	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R152KFTSC	00040V7D4F0VFT	1V , 1kHz	1.5	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R152KFTS	C2012X7R152KFT	1V , 1kHz	1.5	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R182KFTSC C2012X7R182KFTS	C2012X7R182KFT	1V , 1kHz 1V , 1kHz	1.8	nF nF	±10% ±10%	0.60 0.85	±0.15 ±0.15	±0.15 ±0.15	3.5%		(I)
	C2012X7R162RF1S	CZUIZA/RIOZRFI	1V , 1kHz	2.2	nF	±10%	0.60	±0.15	±0.15	3.5%		(l) (l)
	C2012X7R222KFTS	C2012X7R222KFT	1V , 1kHz	2.2	nF	±10%	0.85	±0.15	±0.15	3.5%		(I)
	C2012X7R272KFTSC	OZUTZATRZZZKI I	1V , 1kHz	2.7	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R272KFTS	C2012X7R272KFT	1V , 1kHz	2.7	nF	±10%	0.85	±0.15	±0.15	3.5%		(I)
	C2012X7R332KFTSC	OZO1ZXVINZIZIKI I	1V . 1kHz	3.3	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R332KFTS	C2012X7R332KFT	1V , 1kHz	3.3	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R392KFTSC		1V , 1kHz	3.9	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R392KFTS	C2012X7R392KFT	1V , 1kHz	3.9	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R472KFTSC		1V , 1kHz	4.7	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R472KFTS	C2012X7R472KFT	1V , 1kHz	4.7	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R562KFTSC		1V , 1kHz	5.6	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R562KFTS	C2012X7R562KFT	1V , 1kHz	5.6	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R682KFTSC		1V , 1kHz	6.8	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R682KFTS	C2012X7R682KFT	1V , 1kHz	6.8	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R822KFTSC		1V , 1kHz	8.2	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R103KFTSC		1V , 1kHz	10	nF	±10%	0.60	±0.15	±0.15	3.5%	Paper 4Kncs	(l)
	C2012X7R103KFTS	C2012X7R103KFT	1V , 1kHz	10	nF	±10%	0.85	±0.15	±0.15	3.5%	r apor, mpoo	(l)
	C2012X7R123KFTSC	000101/551001/55	1V , 1kHz	12	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
25V	C2012X7R123KFTS	C2012X7R123KFT	1V , 1kHz	12	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R153KFTSC	00040V7D450VFT	1V , 1kHz	15	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R153KFTS	C2012X7R153KFT	1V , 1kHz	15	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R183KFTSC	C2012X7R183KFT	1V , 1kHz	18	nF	±10%	0.60	±0.15	±0.15	3.5%		(l)
	C2012X7R183KFTS C2012X7R223KFTSC	C2012X/R183KF1	1V , 1kHz 1V , 1kHz	18 22	nF nF	±10%	0.85	±0.15 ±0.15	±0.15	3.5%		(l) (l)
	C2012X7R223KFTS	C2012X7R223KFT	1V , 1kHz	22	nF	±10% ±10%	0.85	±0.15 ±0.15	±0.15 ±0.15	3.5%		(I)
	C2012X7R273KFTSC	GZU1ZX/RZZSKF1	1V , 1kHz	27	nF	±10%	0.60	±0.15	±0.15	3.5%	Embossed, 3Kpcs  Paper, 4Kpcs  Embossed, 3Kpcs  Embossed, 3Kpcs  Embossed, 3Kpcs  Embossed, 3Kpcs	(I)
	C2012X7R273KFTS	C2012X7R273KFT	1V , 1kHz	27	nF	±10%	0.85	±0.15 ±0.15	±0.15	3.5%		(I)
	C2012X7R333KFTSC	GZUTZATRZI SKITT	1V , 1kHz	33	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R333KFTS	C2012X7R333KFT	1V , 1kHz	33	nF	±10%	0.85	±0.15	±0.15	3.5%		(I)
	C2012X7R393KFTSC	OZO1ZXI RODORI I	1V , 1kHz	39	nF	±10%	0.60	±0.15	±0.15	3.5%		(I)
	C2012X7R393KFTS	C2012X7R393KFT	1V , 1kHz	39	nF	±10%	0.85	±0.15	±0.15	3.5%		(I)
	C2012X7R473KFTS	C2012X7R473KFT	1V , 1kHz	47	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R563KFTS	C2012X7R563KFT	1V , 1kHz	56	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R683KFTS	C2012X7R683KFT	1V , 1kHz	68	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R823KFTS	C2012X7R823KFT	1V , 1kHz	82	nF	±10%	0.85	±0.15	±0.15	3.5%		(I)
	C2012X7R104KFTS	C2012X7R104KFT	1V , 1kHz	100	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R124KFTS	C2012X7R124KFT	1V , 1kHz	120	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R154KFTS	C2012X7R154KFT	1V , 1kHz	150	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R184KFTS	C2012X7R184KFT	1V , 1kHz	180	nF	±10%	0.85	±0.15	±0.20	3.5%		(l)
	C2012X7R224KFTS	C2012X7R224KFT	1V , 1kHz	220	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R334KFPS	C2012X7R334KFP	1V , 1kHz	330	nF	±10%	1.25	±0.15	±0.20	5.0%		(I)
	C2012X7R474KFPS	C2012X7R474KFP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	5.0%		(l)
	C2012X7R105□FPS	C2012X7R105_FP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.15	10.0%	Embossed, 3Kpcs	(II)
	C2012X7R225KFPS	C2012X7R225KFP	1V , 1kHz	2.2	uF	±10%	1.25	±0.15	±0.20	10.0%		(II)
	C2012X7R475KFPS	C2012X7R475KFP	1V , 1kHz	4.7	uF	±10%	1.25	±0.15	±0.15	12.5%		(II)*
	C2012X7R123KETS	C2012X7R123KET	1V , 1kHz	12	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R104KETS	C2012X7R104KET	1V , 1kHz	100	nF	±10%	0.85	±0.15	±0.15	3.5%	Paper, 4Kpcs	(I)
	C2012X7R224KETS	C2012X7R224KET	1V , 1kHz	220	nF	±10%	0.85	±0.15	±0.15	3.5%		(l)
	C2012X7R224KEPS	C2012X7R224KEP	1V , 1kHz	220	nF	±10%	1.25	±0.15	±0.20	3.0%		(l)
16V	C2012X7R334KEPS	C2012X7R334KEP	1V , 1kHz	330	nF	±10%	1.25	±0.15	±0.20	5.0%		(l)
100	C2012X7R474KEPS	C2012X7R474KEP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	5.0%		(l)
	C2012X7R684KEPS	C2012X7R684KEP	1V , 1kHz	680	nF	±10%	1.25	±0.15	±0.10	5.0%	Embossed, 3Kpcs	(l)
	C2012X7R105□EPS	C2012X7R105_EP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.20	5.0%		(l)
	C2012X7R225KEPS	C2012X7R225KEP	1V , 1kHz	2.2	uF	±10%	1.25	±0.15	±0.20	10.0%		(I)
	C2012X7R475KEPS	C2012X7R475KEP	1V , 1kHz	4.7	uF	±10%	1.25	±0.15	±0.20	10.0%		(II)
	C2012X7R105□DPS	C2012X7R105 DP	1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.20	5.0%		(l)
101/	C2012X7R225KDPS	C2012X7R225KDP	1V , 1kHz	2.2	uF	±10%	1.25	±0.15	±0.20	10.0%	Embass d OK	(II)
10V	C2012X7R475KDPS	C2012X7R475KDP	1V , 1kHz	4.7	uF	±10%	1.25	±0.15	±0.20	10.0%	⊏mbossea, 3Kpcs	(II)
	C2012X7R106KDPS	C2012X7R106KDP	1V , 1kHz	10	uF	±10%	1.25	±0.15	±0.20	10.0%		(II)
0.017	C2012X7R475KCPS	C2012X7R475KCP	1V , 1kHz	4.7	uF	±10%	1.25	±0.15	±0.20	10.0%	F 1 014	(II)
6.3V	C2012X7R106□CPS	C2012X7R106_CP	1V , 1kHz	10	uF	±10%, ±20%	1.25	±0.15	±0.20	15.0%	⊨mbossed, 3Kpcs	(II)
4V	C2012X7R106_BPS	C2012X7R106_BP	1V , 1kHz	10	uF	±10%, ±20%	1.25	±0.15	±0.20	15.0%	Embossed, 3Kncs	(II)
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### • C3216X7R Series (EIA1206)

			Measuring	Capaci	tance		Thick.	Toleran	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C3216X7R102KGTS	C3216X7R102KGT	1V , 1kHz	1.0	nF	±10%	0.85	±0.15	±0.10	3.5%		(l)
	C3216X7R562_GTS	C3216X7R562 GT	1V , 1kHz	5.6	nF	±5%, ±10%	0.85	±0.15	±0.10	3.5%		(I)
	C3216X7R103_GTS	C3216X7R103 GT	1V , 1kHz	10	nF	±10%, ±20%	0.85	±0.15	±0.10	3.5%		(I)
	C3216X7R123KGTS	C3216X7R123KGT	1V , 1kHz	12	nF	±10%	0.85	±0.15	±0.10	3.5%		(I)
	C3216X7R153KGTS	C3216X7R153KGT	1V , 1kHz	15	nF	±10%	0.85	±0.15	±0.10	3.5%		(I)
	C3216X7R183KGTS	C3216X7R183KGT	1V , 1kHz	18	nF	±10%	0.85	±0.15	±0.10	3.5%		(l)
	C3216X7R223KGTS	C3216X7R223KGT	1V , 1kHz	22	nF	±10%	0.85	±0.15	±0.10	3.5%		(I)
	C3216X7R273KGTS	C3216X7R273KGT	1V , 1kHz	27	nF	±10%	0.85	±0.15	±0.10	3.5%	D 41/	(l)
	C3216X7R333KGTS	C3216X7R333KGT	1V , 1kHz	33	nF	±10%	0.85	±0.15	±0.10	3.5%	Paper, 4Kpcs	(I)
	C3216X7R393KGTS	C3216X7R393KGT	1V , 1kHz	39	nF	±10%	0.85	±0.15	±0.10	3.5%		(l)
	C3216X7R473KGTS	C3216X7R473KGT	1V , 1kHz	47	nF nF	±10%	0.85	±0.15	±0.10 ±0.10	3.5%		(l) (l)
	C3216X7R563KGTS C3216X7R683KGTS	C3216X7R563KGT C3216X7R683KGT	1V , 1kHz 1V , 1kHz	56 68	nF	±10% ±10%	0.85	±0.15 ±0.15	±0.10	3.5%		(I)
50V	C3216X7R823KGTS	C3216X7R823KGT	1V , 1kHz	82	nF	±10%	0.85	±0.15	±0.10	3.5%		(I)
50 V	C3216X7R104KGTS	C3216X7R104KGT	1V , 1kHz	100	nF	±10%	0.85	±0.15	±0.10	3.5%		(I)
	C2012X7R104KGPSG	C2012X7R104KGP	1V , 1kHz	100	nF	±10%	1.25	±0.13	±0.10	5.0%	Embossed, 3Kpcs	(I)
	C3216X7R224KGPS	C3216X7R224KGP	1V, 1kHz	220	nF	±10%	0.95	±0.25	±0.10	3.5%	Embossed, ortpes	(I)
	C3216X7R224KGPSF	OOL TOXITICE IIIO	1V , 1kHz	220	nF	±10%	1.15	±0.20	±0.10	3.5%		(I)
	C3216X7R334 GPS	C3216X7R334 GP	1V , 1kHz	330	nF	±5%, ±10%	1.25	±0.15	±0.15	3.5%	Embossed, 3Kpcs	(I)
	C3216X7R474KGPSG	002107111001	1V . 1kHz	470	nF	±10%	1.25	±0.15	±0.15	3.5%		(I)
	C3216X7R474KGPS	C3216X7R474KGP	1V , 1kHz	470	nF	±10%	1.60	±0.15	±0.20	3.5%	F 1 1 214	(l)
	C3216X7R684KGPS	C3216X7R684KGP	1V , 1kHz	680	nF	±10%	1.60	+0.3/-0.1	+0.3/-0.1	3.5%	Embossed, 2Kpcs	(I)
	C3216X7R105KGPSG		1V , 1kHz	1.0	uF	±10%	1.25	±0.15	±0.15	3.5%	Embossed, 3Kpcs	(I)
	C3216X7R105KGPS	C3216X7R105KGP	1V , 1kHz	1.0	uF	±10%	1.60	±0.30	±0.30	3.5%		(l)
	C3216X7R225KGPSL	C3216X7R225KGP	1V , 1kHz	2.2	uF	±10%	1.60	±0.20	±0.20	10.0%	F 1 1016	(II)
	C3216X7R475KGPS	C3216X7R475KGP	1V , 1kHz	4.7	uF	±10%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(II)
	C3216X7R106KGPSL	C3216X7R106KGP	1V , 1kHz	10	uF	±10%	1.60	±0.20	±0.20	10.0%		(II)
35V	C3216X7R106KNPSL	C3216X7R106KNP	1V , 1kHz	10	uF	±10%	1.60	±0.20	±0.20	10.0%	Embossed, 2Kpcs	(II)
	C3216X7R224KFPS	C3216X7R224KFP	1V , 1kHz	220	nF	±10%	0.95	±0.15	±0.10	3.5%		(l)
	C3216X7R334KFPS	C3216X7R334KFP	1V , 1kHz	330	nF	±10%	0.95	±0.15	±0.10	3.5%	Embossed, 3Kpcs	(l)
	C3216X7R474KFPS	C3216X7R474KFP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	3.5%	Embossed, ortpes	(I)
05)/	C3216X7R105□FPSG		1V , 1kHz	1.0	uF	±10%, ±20%	1.25	±0.15	±0.20	3.5%		(l)
25V	C3216X7R105KFPS	C3216X7R105KFP	1V , 1kHz	1.0	uF	±10%	1.60	±0.30	±0.30	3.5%	Embossed, 2Kpcs	(I)
	C3216X7R225KFPS	C3216X7R225KFP	1V , 1kHz	2.2	uF	±10%	1.60	±0.30	±0.30	5.0%		(l)
	C3216X7R475KFPS	C3216X7R475KFP	1V , 1kHz	4.7	uF	±10%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(l)
	C3216X7R106KFPS	C3216X7R106KFP	1V , 1kHz	10	uF	±10%	1.60	±0.30	±0.30	10.0%		(II)
	C3216X7R104KETS	C3216X7R104KET	1V , 1kHz	100	nF	±10%	0.85	±0.15	±0.10	3.5%	Paper, 4Kpcs	(l)
	C3216X7R474KEPS	C3216X7R474KEP	1V , 1kHz	470	nF	±10%	1.25	±0.15	±0.20	5.0%	Embossed, 3Kpcs	(I)
	C3216X7R105KEPS	C3216X7R105KEP	1V , 1kHz	1.0	uF	±10%	1.25	±0.15	±0.20	5.0%	Lilibosseu, SNPCS	(l)
16V	C3216X7R225KEPS	C3216X7R225KEP	1V , 1kHz	2.2	uF	±10%	1.60	±0.30	±0.30	10.0%		(l)
	C3216X7R475_EPS	C3216X7R475_EP	1V , 1kHz	4.7	uF	±10%, ±20%	1.60	±0.30	±0.30	10.0%		(l)
	C3216X7R106□EPS	C3216X7R106_EP	1V , 1kHz	10	иF	±10%, ±20%	1.60	±0.30	±0.30	10.0%		(II)*
	C3216X7R225KDPS	C3216X7R225KDP	1V , 1kHz	2.2	uF	±10%	1.60	±0.30	±0.30	10.0%	Embossed, 2Kpcs	(I)
10V	C3216X7R106□DPS	C3216X7R106 DP	1V , 1kHz	10	uF	±10%, ±20%	1.60	±0.30	±0.30	10.0%		(II)
	C3216X7R226□DPS	C3216X7R226 DP	0.5V , 120Hz	22	uF	±10%, ±20%	1.60	±0.30	±0.30	10.0%		(II)
6.3V	C3216X7R226KCPS	C3216X7R226KCP	0.5V , 120Hz	22	uF	±10%	1.60	±0.30	±0.30	10.0%		(II)

### • C3225X7R Series (EIA1210)

			Measuring	Capaci	tance		Thick.	Tolerand	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Available Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
	C3225X7R225MGPS	C3225X7R225MGP	1V , 1kHz	2.2	uF	±20%	2.50	±0.3/±0.2	±0.20	5.0%		(II)
50V	C3225X7R475KGPS	C3225X7R475KGP	1V , 1kHz	4.7	uF	±10%	2.50	±0.3/±0.2	±0.20	10.0%	Embossed, 1Kpcs	(II)
50 V	C3225X7R106KGWS	C3225X7R106KGW	1V , 1kHz	10	uF	±10%	2.00	±0.3/±0.2	±0.20	15.0%	Embossed, Tripos	(II)
	C3225X7R106 GPS	C3225X7R106 GP	1V , 1kHz	10	uF	±10%, ±20%	2.50	±0.30	±0.30	10.0%		(II)
35V	C3225X7R106KNPS	C3225X7R106KNP	1V , 1kHz	10	uF	±10%	2.50	±0.30	±0.30	10.0%	Embossed, 1Kpcs	(II)
	C3225X7R475KFPS	C3225X7R475KFP	1V , 1kHz	4.7	uF	±10%	2.00	±0.3/±0.2	±0.20	10.0%	Embossed, 2Kpcs	(l)
25V	C3225X7R106KFPS	C3225X7R106KFP	1V , 1kHz	10	uF	±10%	2.00	±0.3/±0.2	±0.30	10.0%	Embosseu, zkpcs	(II)
	C3225X7R226_FPS	C3225X7R226_FP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.3/±0.2	±0.20	10.0%	Embossed, 1Kpcs	(II)
	C3225X7R475KEPS	C3225X7R475KEP	1V, 1kHz	4.7	uF	±10%	2.50	±0.3/±0.2	±0.20	5.0%	Embossed, 1Kpcs	(II)
16V	C3225X7R106KEPS	C3225X7R106KEP	1V , 1kHz	10	uF	±10%	2.00	±0.3/±0.2	±0.20	10.0%	Embossed, 2Kpcs	(l)
	C3225X7R226_EPS	C3225X7R226_EP	0.5V , 120Hz	22	uF	±10%, ±20%	2.50	±0.3/±0.2	±0.30	10.0%	Embossed, 1Kpcs	(II)
10V	C3225X7R226KDPS	C3225X7R226KDP	0.5V , 120Hz	22	uF	±10%	2.50	±0.3/±0.2	±0.20	10.0%	, , , , , , , , , , , , , , , ,	(II)
10 V	C3225X7R476 DPS	C3225X7R476 DP	0.5V, 120Hz	47	uF	±10%, ±20%	2.50	±0.3/±0.2	±0.20	10.0%	Embosseu, mpcs	(II)

 $<sup>\</sup>hfill\Box$  Tolerance Code: J=±5%, K=±10%, M=±20%; Special tolerance on the request.

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%  $\,$ 

#### ■ X7S Series

#### C0603X7S Series (EIA0201)

	RV	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
	K V	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
I	16V	C0603X7S104_ETS	C0603X7S104_ET	1V , 1kHz	100	nF	±10%,±20%	0.30	± 0.03	±0.03	10.0%	Paper, 15Kpcs	(II)*
I	10V	C0603X7S104KDTS	C0603X7S104KDT	1V , 1kHz	100	nF	±10%	0.30	± 0.03	±0.03	10.0%	Paper, 15Kpcs	(II)
	6.3V	C0603X7S104KCTS	C0603X7S104KCT	1V,1kHz	100	nF	±10%	0.30	± 0.03	±0.03	10.0%	Paper, 15Kpcs	(II)

### • C1005X7S Series (EIA0402)

R	v	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
K	V	DARFON P/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
10	V	C1005X7S105KDTS	C1005X7S105KDT	1V , 1kHz	1.0	uF	±10%	0.50	± 0.10	±0.10	10.0%		(II)
10	) V	C1005X7S225KDTS	C1005X7S225KDT	1V , 1kHz	2.2	иF	±10%	0.50	± 0.20	±0.20	10.0%	Paper, 10Kpcs	(II)
6.3	3V	C1005X7S225KCTS	C1005X7S225KCT	1V , 1kHz	2.2	uF	±10%	0.50	± 0.20	±0.20	10.0%		(II)

### C1608X7S Series (EIA0603)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Tolerar	nce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
16V	C1608X7S225KETS	C1608X7S225KET	1V , 1kHz	2.2	uF	±10%	0.80	± 0.20	±0.20	10.0%		(II)
100	C1608X7S475KETS	C1608X7S475KET	1V , 1kHz	4.7	uF	±10%	0.80	± 0.20	±0.20	10.0%	Paper, 4Kpcs	(II)
10V	C1608X7S475KDTS	C1608X7S475KDT	1V , 1kHz	4.7	uF	±10%	0.80	± 0.15	±0.15	10.0%		(II)

### • C2012X7S Series (EIA0805)

DV	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
RV	DARFON P/N	DARFON P/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
50V	C2012X7S475KGPS	C2012X7S475KGP	1V , 1kHz	4.7	uF	±10%	1.25	± 0.20	±0.20	10.0%		(II)
25V	C2012X7S225KFPS	C2012X7S225KFP	1V , 1kHz	2.2	uF	±10%	1.25	± 0.15	±0.15	10.0%	Embossed, 3Kpcs	(II)
23 V	C2012X7S106 FPS	C2012X7S106_FP	1V , 1kHz	10	uF	±10%,±20%	1.25	± 0.20	±0.20	10.0%		(II)*

### • C3225X7S Series (EIA1210)

	RV	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
	ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
ſ	6.3V	C3225X7S107MCPS	C3225X7S107MCP	0.5V ,	100	uF	±20%	2.50	± 0.30	±0.30	10.0%	Embossed,1Kpcs	(II)*

<sup>□</sup> Tolerance Code: K=±10%, M=±20%; Special tolerance on the request.

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%

- X7T Series
- C1608X7T Series (EIA0603)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N Z	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
6.3V	C1608X7T106MCTS	C1608X7T106MCT	1V , 1kHz	10	uF	±20%	0.80	± 0.20	±0.20	10.0%	Paper, 4Kpcs	(II)

### • C2012X7T Series (EIA0805)

В	v	DARFON P/N	DARFON P/N 2	Measuring	Capac	itance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
K	. V	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
10	VC	C2012X7T226MDPS	C2012X7T226MDP	0.5V , 120Hz	22	uF	±20%	1.25	± 0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)*
6.3	3V	C2012X7T226MCPS	C2012X7T226MCP	0.5V , 120Hz	22	uF	±20%	1.25	± 0.20	±0.20	10.0%	Embossed, 3Kpcs	(II)

 $\hfill\Box$  Tolerance Code: K=±10%, M=±20%; Special tolerance on the request.

(II)\* High temperature load life test are applicable in rated voltage \*100%

- X7U Series
- C3216X7U Series (EIA1206)

RV	DARFON P/N	DARFON P/N 2	Measuring	Capac	tance	Available	Thick.	Toleran	ce(mm)	DF	Standard	Test
ΚV	DARFON F/N	DARFON F/N 2	Condition	Value	Unit	Tolerance	(mm)	L/W	Thick.	(max.)	Packing	Spec.
6.3V	C3216X7U476MCPS	C3216X7U476MCP	0.5V , 120Hz	47	uF	±20%	1.60	± 0.30	±0.30	15.0%	Embossed, 2Kpcs	(II)*
4V	C3216X7U107MBPS	C3216X7U107MBP	0.5V , 120Hz	100	uF	±20%	1.60	± 0.30	±0.30	15.0%	Embossed, 2Kpcs	(II)*

 $<sup>\</sup>hfill\Box$  Tolerance Code: K=±10%, M=±20%; Special tolerance on the request.

<sup>(</sup>II)\* High temperature load life test are applicable in rated voltage \*100%



## • Test Spec.

### General Purpose (I)

			Specif	ication	
	Ite	em	Temp. compensation type	High dielectric constant type	Test Method
1	Operation Tem	perature Range	NP0: -55 to 125 ℃	X5R: -55 to 85 °C X6S: -55 to 105 °C X7R/X7S/X7T/X7U : -55 to 125 °C	
2	Rated <sup>1</sup>	Voltage	Shown in the table of "Part Nun	nber & Characteristic"	The rated voltage is defined as the maximum voltage, which may be applied continuously to the capacitor.
3	Appea	arance	No defects or abnormalities.		Visual inspection
4	Dimer	nsions	Within the specified dimension.		Using calipers
5	Dielectric	: Strength	No defects or abnormalities.		No failure shall be observed when 250% of the rated voltage is applied between the terminations for 1 to 5 seconds. The charge and discharge current is less than 50mA.
6	Insulation Res	sistance ( I.R.)	To apply rated voltage. I.R. $\geq 10 G\Omega$ or $R_i C_R \geq 500 \Omega$ -F (	(whichever is smaller)	The insulation resistance shall be measured with a DC voltage not exceeding the rated voltage at 25°C and 75%RH max, and within 1 minute of charging.
7	Сарас	citance	Within the specified tolerance  * X5R, X6S, X7RS, X7S, X7T,a		The capacitance / D.F. shall be measured at $25^\circ$ C at the frequency and voltage shown in the table of "Part Number & Characteristic".
8	Q/Dissipation	n Factor ( D.F.)	NP0: If C $\leq$ 30pF, DF $\leq$ 1/(400+20C), C in pF If C $>$ 30pF, DF $\leq$ 0.1%.	Shown in the table of "Part Number & Characteristic"	
9		Temperature teristics	Capacitance change NP0 within 0±30ppm/°C under operating temperature range.	Capacitance change X5R/X7R within ±15% X6S/X7S within ±22% X7T: -33% to + 22% X7U:-56% to + 22%	Temperature compensation type:     The capacitance value at 25℃ and 85℃ shall be measured and calculated from the formula given below.     T.C.=(C <sub>85</sub> -C <sub>25</sub> )/C <sub>25</sub> *ΔT*10 <sup>6</sup> (PPM/℃)      High dielectric constant type:     The ranges of capacitance change compared with the 25℃ value over the temperature ranges shall be within the specified ranges.
10	Terminatio	on Strength	No removal of the terminations	or marking defect.	Apply a parallel force of 5N to a PCB mounted sample for 10±1sec. *2N for 0603 (EIA 0201).
11	Deflection (Ber	nding Strength)	No cracking or marking defects Capacitance change: NP0: within ±5% or ± 0.5pF. (wi X5R, X6S, X7R, X7S, X7T, X7U  (Unit in mm)  D  100 T:1.6mm(0.8 mm for 0603 & 1	bichever is larger)  J: within ±12.5%    Value   Size   a   b	9 0.3 5 0.5 0 1.2 0 1.65 0 2.0 0 2.5 0 3.7
12	Solderability of	of Termination	Fig. a.  90% of the terminations are continuously.	e to be soldered evenly and	Fig.b.  Immerse the test capacitor into a methanol solution containing rosin for 3 to 5 seconds, preheat it 150 to 180°C for 2 to 3 minutes and immerse it into SAC305(Sn96.5Ag3.0Cu0.5) solder of 245 ± 5°C for 3±1seconds.
		Appearance	No marking defects		*Preheat the capacitor at 120 to 150°C for 1 minute.
		Cap. Change	NP0 within ±2.5% or 0.25pF		Immerse the capacitor in a SAC305(Sn96.5Ag3.0Cu0.5)
13	Resistance to Soldering Heat	Q/D.F.	( whichever is larger )  If C≤30pF, DF≤1/(400+20C)  If C >30pF, DF≤0.1%	within ±7.5%  To satisfy the specified initial spec.	solder solution at 270±5°C for 10±1 seconds. Let sit at room temperature for 24±2 hours, then measure.  * Preheat 150 to 200°C for size ≥ 3216.
	Soldering Heat	I.R.	I.R. $\geq$ 10,000MΩ or R <sub>i</sub> C <sub>R</sub> $\geq$ 500Ω-F. (whichever is smaller)	I.R. $\geq$ 10,000MΩor R <sub>i</sub> C <sub>R</sub> $\geq$ 500Ω-F. (whichever is smaller)	*High dielectric constant type: Initial measurement: perform a heat treatment at 150+0/-10°C for one hour and then let sit for 24±2 hours at room temperature. Perform the initial measurement.



			Specific	cation		
	Ite	m	Temp. compensation type	High dielectric constant type	Test Method	
		Appearance	No marking defects		Solder the capacitor to supporting jig (Glass epoxy boar	rd) and
		Cap. Change	NP0 within ±2.5% or 0.25pF (whichever is larger)	X5R/X6S/X7R/X7S/X7T within ±7.5% X7U within ±30%	perform the five cycles according to the four heat treatm listed in the following table. Let sit for 24±2hrs at room	nents
	Temperature cycle	Q/D.F.	If C≤30pF, DF≤1/(400+20C)  If C >30pF, DF≤0.1%	To satisfy the specified initial spec.	temperature, then measure.  Step 1: Minimum operating temperature 30±3min Step 2: Room temperature 2~3 min	ı
14	(Thermal shock)	LR.	I.R. $\ge$ 10GΩor R <sub>i</sub> C <sub>R</sub> $\ge$ 500Ω-F. (whichever is smaller)	I.R. $\geq 10G\Omega$ or $R_iC_R \geq 500\Omega$ -F. (whichever is smaller)	Step 3: Maximum operating temperature 30±3min Step 4: Room temperature 2~3min *High dielectric constant type: Initial measurement: perform a heat treatment at 150±1 one hour and then let sit for 24±2 hours at room temp. If the initial measurement.	l0°C for
		Appearance	No marking defects		Apply the rated voltage at 40±2℃ and 90 to 95% humid	dity for
		Cap. Change	NP0 within ±7.5% or 0.75pF (whichever is larger)	X5R/X6S/X7R/X7S/X7T/X7U within ±12.5%	500±12 hours. The charge / discharge current is less tha 50mA.	an
		Q/D.F.	If C>30pF, DF $\leq$ 0.5% If C $\leq$ 30pF,DF $\leq$ 1/(100+10xC/3)	X5R/X6S/X7R/X7S/X7T/X7U 200% max of initial spec	[Temperature compensation type] Remove and let sit for 24±2 hours at room temperature,	then
15	Homidito land		C in pF I.R. ≧500MΩ or	I.R.≧500MΩ or	measure.	, uioii
15	Humidity load		$R_iC_R \ge 25\Omega$ -F.	$R_iC_R \ge 25\Omega$ -F.	[High dielectric constant type]	
			(whichever is smaller)	(whichever is smaller)	*Initial measurement	
		I.R.			Perform a heat treatment at 150+0/-10°C for one hour a let sit for 24±2 hours at room temperature.	and then
					Perform the initial measurement.	
					*Measurement after test	
					Perform a heat treatment and then let sit for 24±2 hours room temperature, then measure.	at
		Appearance	No marking defects		Apply 200% of the rated voltage for 1000±12 hours at the	
		Cap. Change	NP0 within ±7.5% or 0.75pF (whichever is larger)	X5R/X6S/X7R/X7S/X7T/X7U within ±12.5%	maximum operating temperature $\pm3\%$ . The charge / discurrent is less than 50mA.	scharge
		Q/D.F.	If C>30pF, DF $\leq$ 0.3% If 10pF <c<math>\leq30pF, DF<math>\leq</math>1/(275+5xC/2)</c<math>	X5R/X6S/X7R/X7S/X7T/X7U 200% max of initial spec.	[Temperature compensation type] Remove and let sit for 24±2 hours at room temperature, measure.	, then
16	High temperature load life test		If C≦10pF, DF≦1/(200+10C), C in pF		[High dielectric constant type] *Initial measurement	
			More than $1G\Omega$ or $R_iC_r \ge 50\Omega$ -F (whichever is less.)	More than $1G\Omega$ or $R_iC_r \ge 50\Omega$ -F (whichever is	Perform a heat treatment at 150+0/-10°C for one hour a let sit for 24±2 hours at room temperature.	and then
		I.R.		less.)	Perform the initial measurement.	
					*Measurement after test	
					Perform a heat treatment and then let sit for 24±2 hours room temperature, then measure.	s at

## • General Purpose (II)

	Ite	em	Specification	Test Method
1	Operation Tem	perature Range	X5R: -55 to 85 °C X6S: -55 to 105 °C X7R/X7S/X7T/X7U: -55 to 125 °C	
2	Rated \	/oltage	Shown in the table of "Part Number & Characteristic"	The rated voltage is defined as the maximum voltage, which may be applied continuously to the capacitor.
3	Appea	rance	No defects or abnormalities.	Visual inspection
4	Dimer	sions	Within the specified dimension.	Using calipers
5	Dielectric	Strength	No defects or abnormalities.	No failure shall be observed when 250% of the rated voltage is applied between the terminations for 1 to 5 seconds. The charge and discharge current is less than 50mA.
6	Insulation Res	sistance ( I.R.)	$R_iC_R \ge 50\Omega$ -F	The insulation resistance shall be measured with a DC voltage not exceeding the rated voltage at 25°C and 75%RH max, and within 1 minute of charging, provided the charge/discharge current is less than
7		itance	Within the specified tolerance  * X5R, X6S, X7R, X7S, X7T and X7U at 1000 hours  Shown in the table of "Part Number & Characteristic"	50 mA.  The capacitance / D.F. shall be measured at 25°C at the frequency and voltage shown in the table of "Part Number & Characteristic".
8	Q/Dissipation	Factor ( D.F.)		
9	Capacitance Charact		Capacitance change  X5R/X7R within ±15% , X6S/X7S within ±22%  X7U: -56% to + 22%  X7T: -33% to + 22%	The ranges of capacitance change compared with the $25\%$ value over the temperature ranges shall be within the specified ranges.
10	Terminatio	n Strength	No removal of the terminations or marking defect.	Apply a parallel force of 5N to a PCB mounted sample for 10±1sec. *2N for 0603 (EIA 0201).
			No cracking or marking defects shall occur at 1mm deflection.  Capacitance change:  X5R, X6S, X7R, X7S, X7T, X7U :within ±12.5%	Solder the capacitor to the test jig (glass epoxy boards) shown in Fig.a using a SAC305(Sn96.5Ag3.0Cu0.5) solder (then let sit for 24±2 hours for X5R, X6S, X7R, X7S, X7T and X7U).  Then apply a force in the direction shown in Fig.b. The soldering shall be done with the reflow method and shall be conducted with care so that the soldering is uniform and free of defects such as heat shock.
11	Deflection (Ber	nding Strength)	0603 0.3 0 1005 0.4 1 1608 1.0 3 2012 1.2 4 3216 2.2 5 4520 3.5 7	Capacitance Weter
12	Solderability of	of Termination	90% of the terminations are to be soldered evenly and continuously.	Immerse the test capacitor into a methanol solution containing rosin for 3 to 5 seconds, preheat it 150 to $180^{\circ}$ C for 2 to 3 minutes and immerse it into SAC305(Sn96.5Ag3.0Cu0.5) solder of $245 \pm 5^{\circ}$ C for $3\pm 1$ seconds.
		Appearance	No marking defects	*Preheat the capacitor at 120 to 150℃ for 1 minute.
		Cap. Change	X5R/X6S/X7R/X7S/X7T/X7U within ±7.5%	Immerse the capacitor in a SAC305(Sn96.5Ag3.0Cu0.5) solder solution at
	Resistance to	D.F.	To satisfy the specified initial spec.	270±5°C for 10±1 seconds. Let sit at room temperature for 24±2 hours, then measure.
13	Soldering Heat	I.R.	$R_iC_R \ge 50\Omega$ -F.	* Preheat 150 to 200°C for size ≥ 3216.  * Initial measurement : perform a heat treatment at 150+0/-10°C for one hour and then let sit for 24±2 hours at room temperature. Perform the initial measurement.



	Ite	m	Specification	Test Method
		Appearance Cap. Change	No marking defects X5R/X6S/X7R/X7S/X7T within ±7.5% X7U within ±30%	Solder the capacitor to supporting jig (Glass epoxy board) and perform the five cycles according to the four heat treatments listed in the following table. Let sit for 24±2hrs at room temperature, then measure.
14	Temperature cycle (Thermal shock)	Q/D.F.	To satisfy the specified initial spec. $I.R. \ge 10G\Omega \text{ or } R_i C_R \ge 50\Omega \text{-F.}$ (whichever is smaller)	Step 1: Minimum operating temperature 30±3min  Step 2: Room temperature 2-3 min  Step 3: Maximum operating temperature 30±3min  Step 4: Room temperature 2-3min  * Initial measurement: perform a heat treatment at 150±10°C for one hour and then let sit for 24±2 hours at room temp. Perform the initial measurement.
		Appearance	No marking defects	Apply the rated voltage at 40±2°C and 90 to 95% humidity for 500±12
		Cap. Change	X5R/X6S/X7R/X7S/X7T/X7U within ±12.5%	hours. The charge / discharge current is less than 50mA.
		Q/D.F.	X5R/X6S/X7R/X7S/X7T/X7U 200% max of initial spec.	<u></u>
15	Humidity load	LR.	I.R. $\geq \! 500 M\Omega$ or $R_i C_R \! \geq \! 12.5 \Omega\text{-F}.$ (whichever is smaller)	*Initial measurement Perform a heat treatment at 150+0/-10°C for one hour and then let sit for 24±2 hours at room temperature. Perform the initial measurement. *Measurement after test Perform a heat treatment and then let sit for 24±2 hours at room temperature, then measure.
		Appearance	No marking defects	Apply 150% of the rated voltage for 1000±12 hours at the maximum
		Cap. Change	X5R/X6S/X7R/X7S/X7T/X7U within ±12.5%	operating temperature ± 3°C. The charge / discharge current is less than
		D.F.	X5R/X6S/X7R/X7S/X7T/X7U 200% max of initial spec	50mA.
16	High temperature load life test	LR.	More than 1G $\Omega$ or R <sub>i</sub> C <sub>r</sub> $\ge$ 25 $\Omega$ -F (whichever is less.)	*Initial measurement  Perform a heat treatment at 150+0/-10°C for one hour and then let sit for 24±2 hours at room temperature.  Perform the initial measurement.  *Measurement after test  Perform a heat treatment and then let sit for 24±2 hours at room temperature, then measure.  * Some of the parts are applicable in rated voltage *100%. Please refer to "Part Number & Characteristic" with (II)* labeled in "Test Spec."

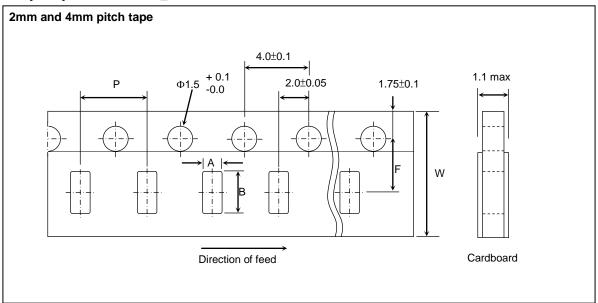
## **DARF®**N

### **Package**

#### • Tape and reel packaging

Tape and reel packaging is currently the most promising system for high-speed production. A typical 180mm (7 inch) diameter reel contains 1,500 to 15,000 capacitors, 250mm (10 inch) contains 10,000 capacitors, and 330mm (13 inch) contains 10,000 to 50,000 capacitors. Three standard sizes are available in taped and reeled package either with paper carrier tapes or embossed tapes.

#### [Paper tape specifications]

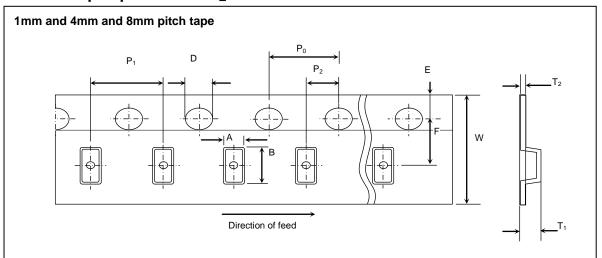


	PRODUCT SIZE CODE										
SYMBOL	C0603	3(0201)		<b>(0402)</b> dard		<b>(0402)</b> ial (1)		( <b>0402)</b> ial (2)		<b>(0402)</b> ial (3)	UNIT
	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	
А	0.38	± 0.04	0.65	± 0.10	0.70	± 0.10	0.72	± 0.10	0.80	± 0.10	mm
В	0.68	± 0.04	1.15	± 0.10	1.19	± 0.10	1.25	± 0.10	1.35	± 0.10	mm
F	3.5	± 0.05	3.5	± 0.05	3.5	± 0.05	3.5	± 0.05	3.5	± 0.05	mm
Р	2	± 0.10	2	± 0.10	2	± 0.10	2	± 0.10	2	± 0.10	mm
W	8	± 0.20	8	± 0.20	8	± 0.20	8	± 0.20	8	± 0.20	mm

	PRODUCT SIZE CODE (EIA)										
SYMBOL		( <b>0603)</b> dard		<b>(0603)</b> ial (1)		<b>(0603)</b> al (2/3)	C2012	(0805)	C3216	(1206)	UNIT
	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	SIZE	TOL.	
А	1.0	±0.2	1.0	±0.2	1.1	±0.2	1.5	±0.2	1.9	±0.2	mm
В	1.8	±0.2	1.8	±0.2	1.9	±0.2	2.3	±0.2	3.6	±0.2	mm
F	3.5	±0.05	3.5	±0.05	3.5	±0.05	3.5	±0.05	3.5	±0.05	mm
Р	4	±0.1	4	±0.1	4	±0.1	4	±0.1	4	±0.1	mm
W	8	±0.2	8	±0.2	8	±0.2	8	±0.2	8	±0.2	mm



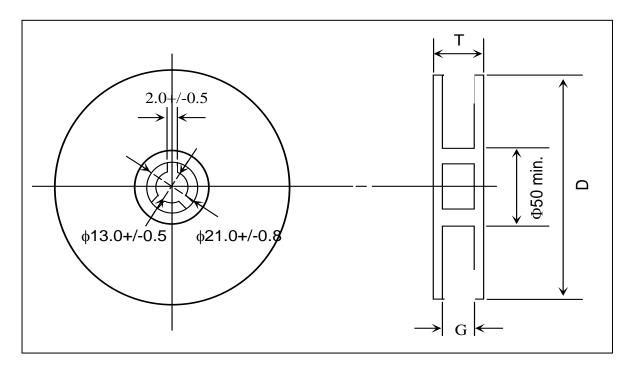
## [Embossed tape specifications]



For W= 8mm:  $T_1$ =2.5mm max. For W= 12mm:  $T_1$ = 4.5mm

	PRODUCT SIZE CODE							
DIMENSION (mm)		4 mm	tape		8 mm tape			
()	1608 (0603)	2012 (0805)	3216 (1206)	3225 (1210)	4520 (1808)	4532 (1812)		
<b>P</b> <sub>1</sub>	4±0.1	4±0.1	4±0.1	4±0.1	8±0.1	8±0.1		
Po	4±0.1	4±0.1	4±0.1	4±0.1	4±0.1	4±0.1		
P <sub>2</sub>	2±0.05	2±0.05	2±0.05	2±0.05	2±0.05	2±0.05		
Α	1.2±0.2	1.45±0.2	1.9±0.2	2.8±0.2	2.3±0.2	3.6±0.2		
В	2.0±0.2	2.3±0.2	3.5±0.2	3.6±0.2	4.9±0.2	4.9±0.2		
W	8±0.3	8±0.2	8±0.2	8±0.2	12±0.2	12±0.2		
E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1		
F	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	5.5±0.05	5.5±0.05		
D	1.5 (+0.1/-0.0)	1.5 (+0.1/-0.0)	1.5 (+0.1/-0.0)	1.5 (+0.1/-0.0)	1.5 (+0.1/-0.0)	1.5 (+0.1/-0.0)		
<b>T</b> <sub>1</sub>	1.4 max.	2.5 max.	2.5 max.	2.5 max.	4.5	4.5		
T <sub>2</sub>	0.25±0.1	0.305±0.1	0.30±0.1	0.30±0.1	0.30±0.1	0.30±0.1		

## [Reel specifications]



TAPE WIDTH (mm)	G (mm)	T max. (mm)	D (mm)
4	5.0 ± 1.5	8.0	180
8	10.0 ± 1.5	14.5	180
8	10.0 ± 1.5	14.5	250
8	10.0 ± 1.5	14.5	330
12	14.0 ± 1.5	18.5	180



## [Thickness and Packing Amount]

Thickness			Amount per reel				
			180	0 mm (7")	330 mm (13")		
Code	Spec.(mm)	Size (EIA)	Paper	Embossed	Paper	Embossed	
Z	0.20	0402 (01005)	20K	40K <sup>#1</sup>			
Α	0.30	0603 (0201)	15K		50K		
А	0.30	1005 (0402)	15K		50K		
В	0.50	1005 (0402)	10K		50K		
Q	0.45	1005 (0402)	10K		50K		
Q	0.45	1608 (0603)	4K		15K		
С	0.60	2012 (0805)	4K		15K		
C	0.00	3216 (1206)	4K		15K		
D	0.80	1608 (0603)	4K	4K	15K		
		2012 (0805)	4K		15K		
Е	0.05	3216 (1206)	4K		15K		
_	0.85	3225 (1210)		3K		10K	
		4532 (1812)		1K			
	0.05	2012 (0805)		3K			
I	0.95	3216 (1206)		3K			
F	1.15	3216 (1206)		3K		10K	
Г	1.10	4520 (1808)		3K			
		2012 (0805)		2K/3K		10K	
		3216 (1206)		3K		10K	
G	4.05	3225 (1210)		3K			
G	1.25	4520 (1808)		2K/3K			
		4532 (1812)		1K			
		3225 (1210)		3K			
		3216 (1206)		2K			
L	1.60	3225 (1210)		2K			
L	1.00	4520 (1808)		2K			
		4532 (1812)		1K			
	2.00	3216 (1206)		2K/3K			
N		3225 (1210)		1K/2K			
IN	2.00	4520 (1808)		1K			
		4532 (1812)		1K			
Р	2.50	3225 (1210)		500pcs/1K			

#1: 4mm width 1mm pitch Embossed Taping

### [Packing Rule]

EIA SIZE	Tape	Reel Size	Reels/Box	Boxes/ Carton
01005	Emboss	7"	8	12
01005	Paper	7"	5	12
0201	Paper	7"	5	12
0402	Paper	7"	5	12
0603	Paper/Emboss	7"	5	12
0805	Paper/Emboss	7"	5	12
1206	Paper/Emboss	7"	5	12
1210	Emboss	7"	5	12
1808	Emboss	7"	5	12
1812	Emboss	7"	5	12

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# Others [Storage]

- 1. The chip capacitors shall be packaged in carrier tapes or bulk cases.
- 2. Keep storage place temperatures from  $+5^{\circ}$ °C to  $+35^{\circ}$ °C, humidity from 45 to 70% RH.
- 3. The storage atmosphere must be free of gas containing sulfur and chlorine. Also, avoid exposing the product to saline moisture. If the product is exposed to such atmospheres, the terminations will oxidize and solderability will be affected.
- 4. The solderability is assured for 12 months from our final inspection date if the above storage condition is followed.

#### [Circuit Design]

- 1. Once application and assembly environments have been checked, the capacitor may be used in conformance with the rating and performance, which are provided in both the catalog and the specifications. Exceeding the specifications listed may result in inferior performance. It may also cause a short, open, smoking, or flaming to occur, etc.
- 2. Please use the capacitors in conformance with the operating temperature provided in both the catalog and the specifications. Be especially cautious not to exceed the maximum temperature. In the situation the maximum temperature set forth in both the catalog and specifications is exceeded, the capacitor's insulation resistance may deteriorate, power may suddenly surge and short-circuit may occur. The loss of capacitance will occur, and may self-heat due to equivalent series resistance when alternating electric current is passed through. As this effect becomes critical in high frequency circuits, please exercise with caution. When using the capacitor in a (self-heating) circuit, please make sure the surface of the capacitor remains under the maximum temperature for usage. Also, please make certain temperature rise remain below 20°C.
- 3. Please keep voltage under the rated voltage, which is applied to the capacitor. Also, please make certain the peak voltage remains below the rated voltage when AC voltage is super-imposed to the DC voltage. In the situation where AC or pulse voltage is employed, ensure average peak voltage does not exceed the rated voltage. Exceeding the rated voltage provided in both catalog and specifications may lead to defective withstanding voltage or, in worse case situations, may cause the capacitor to burn out.
- 4. It's is a common phenomenon of high-dielectric products to have a deteriorated amount of static electricity due to the application of DC voltage.



#### [Handling]

Chip capacitors should be handled with care to avoid contamination or damage. The use of vacuum pick-up or plastic tweezers is recommended for manual placement. Tape and reeled packages are suitable for automatic pick and placement machine.

#### [Flux]

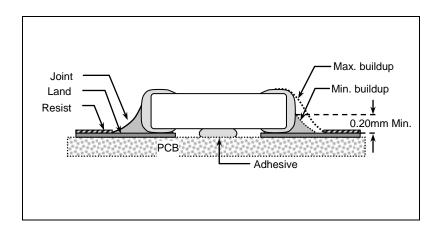
- 1. An excessive amount of flux or too rapid temperature rise can causes solvent burst, solder can generate a large quantity of gas. The gas can spreads small solder particles to cause solder balling effect or bridging problem.
- 2. Flux containing too high of a percentage of halide may cause corrosion of termination unless sufficient cleaning is applied.
- 3. Use rosin-type flux. Highly acidic flux (halide content less than 0.2wt%) is not recommended.
- 4. The water soluble flux causes deteriorated insulation resistance between outer terminations unless sufficiently cleaned.

#### [Component Spacing]

For wave soldering components, the spacing must be sufficient far apart to prevent bridging or shadowing. This is not so important for reflow process but enough space for rework should be considered. The suggested spacing for reflow soldering and wave soldering is 0.5mm and 1.0mm, respectively.

#### [Solder Fillet]

Too much solder amount may increase solder stress and cause crack risk. Insufficient solder amount may reduce adhesive Strength and cause parts falling off PCB. When soldering, confirm that the solder is placed over 0.2mm of the surface of the terminations.

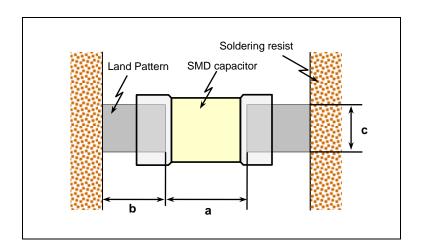




#### [Recommended Land Pattern Dimensions]

When mounting the capacitor to substrate, it's important to consider that the amount of solder (size of fillet) used has a direct effect upon the capacitor once it's mounted.

- 1. The greater the amount of solder, the greater the stress to the elements, as this may cause the substrate to break or crack.
- 2. In the situation where two or more devices are mounted onto a common land, separate the device into exclusive pads by using soldering resist.
- 3. Land width equal to or less than component. It is permissible to reduce land width to 80% of component width.



Size mm (EIA)	L x W (mm) (Dimension tolerance)	a (mm)	b (mm)	c (mm)
0402 (01005)	0.4*0.2	0.16 to 0.20	0.12 to 0.18	0.20 to 0.23
0603 (0201)	0.6*0.3	0.15 to 0.35	0.2 to 0.3	0.25 to 0.3
4005 (0402)	1.0*0.5 (within±0.10)	0.3 to 0.5	0.35 to 0.45	0.4 to 0.5
1005 (0402)	1.0*0.5 (±0.15 or ±0.20)	0.4 to 0.6	0.4 to 0.5	0.5 to 0.6
4000 (0000)	1.6*0.8 (within±0.10)	0.7 to 1.0	0.6 to 0.8	0.7 to 0.8
1608 (0603)	1.6*0.8 (±0.15 or ±0.20)	0.8 to 1.1	0.7 to 0.9	0.8 to 0.9
2012 (0805)	2.0*1.25	1.0 to 1.3	0.7 to 0.9	1.0 to 1.2
3216 (1206)	3.2*1.6	2.1 to 2.5	1.0 to 1.2	1.3 to 1.6
3225 (1210)	3.2*2.5	2.1 to 2.5	1.0 to 1.2	2.0 to 2.5
4520 (1808)	4.5*2.0	3.2 to 3.8	1.2 to 1.4	1.7 to 2.0
4532 (1812)	4.5*3.2	3.2 to 3.8	1.2 to 1.4	2.7 to 3.2

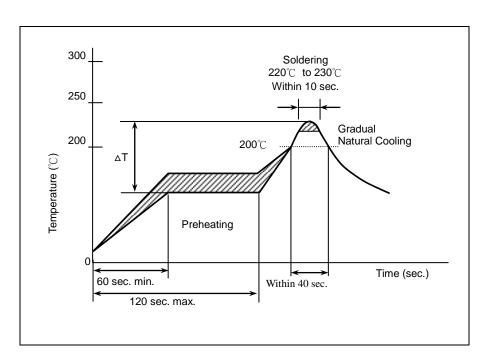


#### [Resin Mold]

If a large amount of resin is used for molding the chip, cracks may occur due to contraction stress during curing. To avoid such cracks, use a low shrinkage resin. The insulation resistance of the chip will degrade due to moisture absorption. Use a low moisture absorption resin. Check carefully that the resin does not generate a decomposition gas or reaction gas during the curing process or during normal storage. Such gases may crack the chip capacitor or damage the device itself.

#### [Soldering Profile for SMT Process with SnPb Solder Paste]

#### **Reflow Soldering**

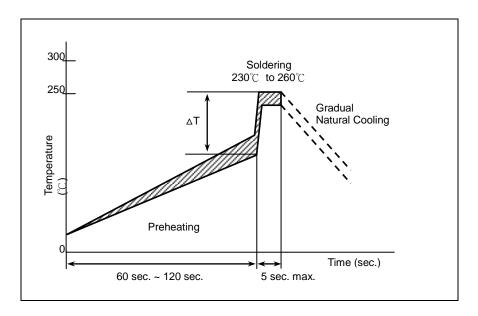


The difference between solder and chip surface should be controlled as following table. The rate of preheat should not exceed  $4^{\circ}$ C/sec and a target of  $2^{\circ}$ C/sec is preferred.

Chip Size	3216 and smaller	3225 and above
Preheating	∆T≦150°C	∆T≦130°C

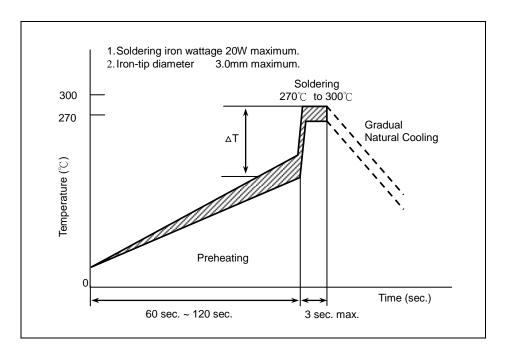
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### **Wave Soldering**



Chip Size	3216 and smaller	3225 and above
Preheating	∆T≦150°C	-

### **Soldering Iron**

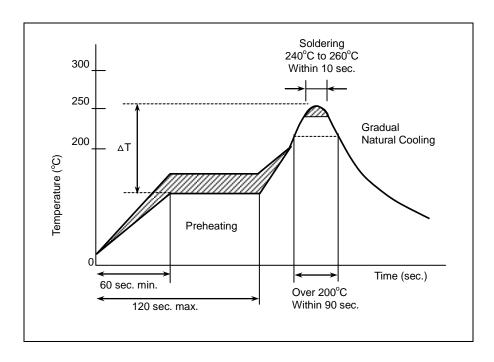


Chip Size	3216 and smaller	3225 and above		
Preheating	∆T≦190°C	∆T≦130°ℂ		



### [Soldering]

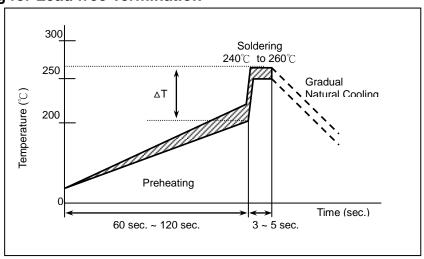
### **Reflow Soldering for Lead free Termination**



The difference between solder and chip surface should be controlled as following table. The rate of preheat should not exceed  $4^{\circ}$ C/sec and a target of  $2^{\circ}$ C/sec is preferred.

Chip Size	3216 and smaller	3225 and above
Preheating	∆T≦150°C	∆T≦130°C

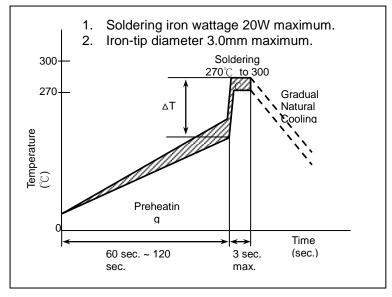
### Flow Soldering for Lead free Termination



Chip Size	3216 and smaller	3225 and above
Preheating	∆T≦150°C	-



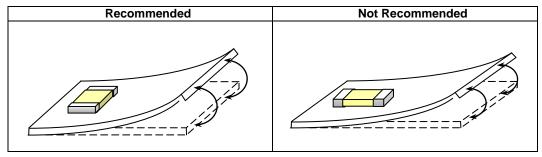
#### Soldering Iron



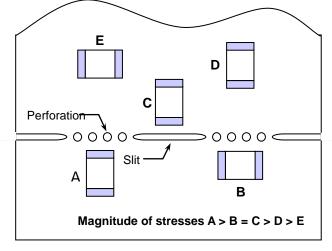
Chip Size	3216 and smaller	3225 and above
Preheating	∆T≦190°C	∆T≦130°C

### [Chip Layout and Breaking PCB]

1. To layout the SMD capacitors for reducing bend stress from board deflection of PCB. The following are examples of Hood and bad layout.



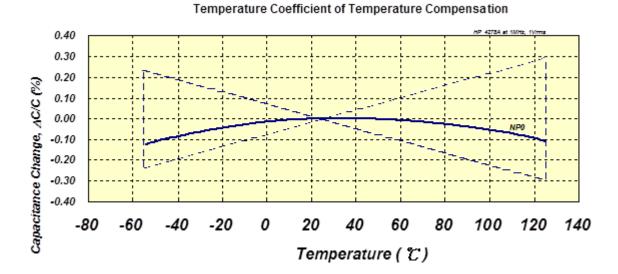
2. When breaking PCB, the layout should be noted that the mechanical stresses are depending on the position of capacitors. The following example shows recommendation for better design.





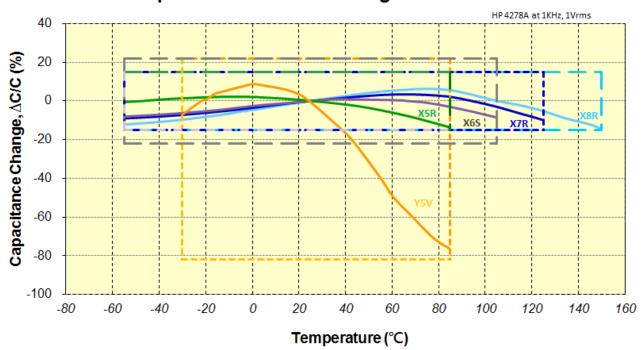
### **[Temperature Coefficient]**

• Class 1 (Temperature Compensation series)



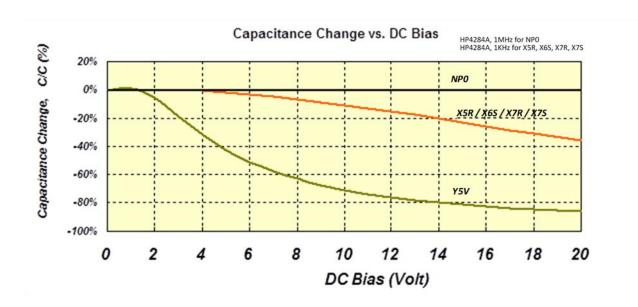
Class 2 (High Dielectric Constant Series)

## **Temperature Coefficient of High Dielectric Constant**



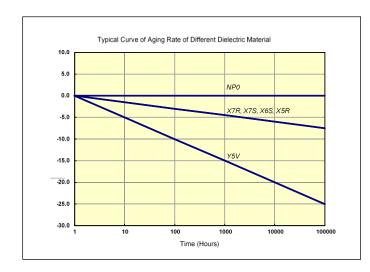


#### **[DC Voltage Coefficient]**



#### [Aging Rate]

The capacitance and dissipation factor of class 2 capacitors decreases with time. It is known as 'aging' that follows a logarithmic low and expressed in terms of an aging constant. Aging is caused by a gradual re-alignment of the crystalline structure of the ceramic. The aging constant is defined as the percentage loss of capacitance at a 'time decade'. The law of capacitance aging is expressed as following equation:



$$C_{t2} = C_{t1} \times (1 - k \times \log_{10}(t_2/t_1))$$

C<sub>t1</sub>: Capacitance after t1 hours of start aging.

C<sub>t2</sub>: Capacitance after t2 hours of start aging.

k: aging constant (capacitance decrease per decade)

t1, t2: time in hours from start of aging.

A typical curve of aging rate is shown in following figure.

When heating the capacitors above Curie temperature  $(130^{\circ}\text{C} \sim 150^{\circ}\text{C})$  the capacitance can be re-new. So capacitance of class 2 capacitors will be complete de-aged by soldering process; subsequently a new aging process begins.

Because of aging, it is specified an age for measurement to meet the prescribed tolerance for class 2 capacitors. Normally, 1000 hours (t<sub>2</sub>=1000 hrs) is defined.



### [Peeling Off Force]

Peeling off force: 0.1N to 1.0 N<sup>\*</sup> in the direction shown as below.

The peeling speed: 300±10 mm/min



- 1. The taped tape on reel is wound clockwise. The sprocket holes are to the right as the tape is pulled toward the user.
- 2. There are minimum 150 mm as the leader and minimum 40 mm empty tape as the tail is attached to the end of the tape.