F95

Conformal coated Chip

FRANKIELESS tm





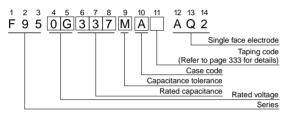
• Compliant to the RoHS directive (2002/95/EC).

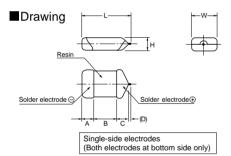


Applications

- Smartphone
- Wireless module
- Tablet PC
- e-book

■Type numbering system (Example : 4V 330µF)





Dimensions

	11310113						(mm)
Case code	L	W	Н	Α	В	С	(D)
R	2.2 ± 0.3	1.25 ± 0.3	0.65MAX.	0.6 ± 0.3	0.8 ± 0.3	0.5MIN	(0.2)
Р	2.2 ± 0.3	1.25 ± 0.3	1.0 ± 0.2	0.6 ± 0.3	0.8 ± 0.3	0.8 ± 0.3	(0.2)
Q	3.2 ± 0.2	1.6 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	1.2 ± 0.2	0.8 ± 0.2	(0.2)
S	3.2 ± 0.3	1.6 ± 0.3	1.0 ± 0.2	0.8 ± 0.3	1.2 ± 0.3	0.8 ± 0.3	(0.2)
Α	3.2 ± 0.3	1.7 ± 0.3	1.4 ± 0.2	0.8 ± 0.3	1.2 ± 0.3	0.8 ± 0.3	(0.2)
Т	3.5 ± 0.2	2.7 ± 0.2	1.0 ± 0.2	0.8 ± 0.2	1.2 ± 0.2	1.1 ± 0.2	(0.2)
В	3.5 ± 0.2	2.8 ± 0.2	1.8 ± 0.2	0.8 ± 0.3	1.2 ± 0.3	1.1 ± 0.3	(0.2)
•							

D dimension only for reference

680

687

(T)

■Specifications

Item	Performance Characteristics			
Category Temperature Range	-55 to +125°C (Rated temperature : +85°C)			
Capacitance Tolerance	±20%, ±10% (at 120Hz) (However R • P Case ±20%)			
Dissipation Factor (at 120Hz)	Refer to next page			
ESR(100kHz)	Refer to next page			
Leakage Current	Refer to next page Provided that • After 1 minute's application of rated voltage, leakage current at 85°C, 10 times or less than 20°C specified value. • After 1 minute's application of rated voltage, leakage current at 125°C, 12.5 times or less than 20°C specified value.			
Capacitance Change by Temperature	+15% Max. (at +125°C) +10% Max. (at +85°C) -10% Max. (at -55°C)			
Damp Heat (Steady State)	At 40°C, 90 to 95% R.H., For 500 hours (No voltage applied) Capacitance Change Refer to next page (*1) Dissipation Factor Initial specified value or less Leakage Current			
Temperature Cycles	At -55°C / +125°C, 30 minutes each, For 5 cycles, Capacitance Change Refer to next page (*1) Dissipation Factor Initial specified value or less Leakage Current			
	10 seconds reflow at 260°C, 10 seconds immersion at 260°C			
Resistance to Soldering Heat	Capacitance Change Refer to next page (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less			
Surge*	After application of surge voltage in series with a 33Ω resistor at the rate of 30 seconds ON, 30 seconds OFF, for 1000 successive test cycles at 85°C, capacitors shall meet the characteristic requirements table below. Capacitance Change Refer to next page (*1) Dissipation Factor Initial specified value or less Leakage Current			
Endurance*	After 2000 hours' application of rated voltage at 85°C, capacitors shall meet the characteristic requirements table below. Capacitance Change Refer to next page (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less			
Shear Test	After applying the pressure load of 5N for 10 ± 1 seconds horizontally to the center of capacitor side body which has no electrode and has been soldered beforehand on a substrate, there shall be found neither exfoliation nor its sign at the terminal electrode.			
Terminal Strength	Keeping a capacitor surface-mounted on a substrate upside down and supporting the substrate at both of the opposite bottom points 45mm apart from the center of capacitor, the pressure strength is applied with a specified jig at the center of substrate so that the substrate may bend by 1mm as illustrated. Then, there shall be found no remarkable abnormality on the capacitor terminals.			

^{*} As for the surge voltage, refer to page 332 for details.

20

1D

Р

S·A

S·A·B

В

25

1E

R

R·P

P·Q·S·A

(Q) • (S)

A • (T) • B

Stand	ard Rating	gs			
Can	V	4	6.3	10	16
Cap. (µF)	Code	0G	0J	1A	1C
1	105				
1.5	155				
2.2	225				
3.3	335				
4.7	475				R•P
6.8	685				
10	106			R∙P	P·Q·S·A
15	156			Р	S•A
22	226		R	P·Q·S·A	Q·S·A·T·B
33	336		(R) • P	P·Q·S·A	(A) • T • B
47	476	(R)	Р	P • (Q) •S•A•T•B	В
68	686		Р	В	
100	107	P·S·A	P·Q·S·A·T·B	(S) • A • T • B	
150	157	P•B	В		
220	227	(P) · Q · S · A · T · B	(S) • (A) • (T) • B		() The series in pa
330	337	(P) • (S) • A • T• B	В		Please contact to y these series are be
470	477	(P) • (A) • (T) • B	(B)		

() The series in parentheses are being developed.

Please contact to your local Nichicon sales office when these series are being designed in your application.

35

1\/

P·S

Α

В

F95

■ Standard Ratings

100	Rated Volt	Rated Capacitance (µF)	Case code	Part Number	*2 Leakage Current (µA)	Disspation Factor (%@120Hz)	ESR (Ω@100kHz)	*1 ∆C/C (%)
100		100	Р	F950G107MPAAQ2	4.0	30	1.2	±15
150		100	s	F950G107MSAAQ2	4.0	14	0.8	*
## 150 ## 150		100	Α	F950G107MAAAQ2	4.0	12	0.5	*
4V 220		150	Р	F950G157MPAAQ2	12.0	31	1.1	±20
4V 220 S F950G227MSAAQ2 8.8 30 0.8 ±15 220 T F950G227MTAAQ2 8.8 25 0.6 * 220 B F950G227MTAAQ2 8.8 25 0.6 * 330 A F950G337MAAQ2 13.2 40 0.8 ±20 330 T F950G337MTAAQ2 13.2 40 0.8 ±20 330 B F950G337MBAAQ2 13.2 30 0.6 ±15 470 B F950G37MBAAQ2 13.2 30 0.6 ±15 470 B F950G37MBAAQ2 13.2 30 0.6 ±15 470 B F950J376MPAAQ2 18.8 40 0.4 ±20 22 R F950J26MRAQ2 1.4 20 2.0 ±20 33 P F950J376MPAAQ2 2.1 14 1.1 * 47 P F950J476MPAAQ2 2.1 14 1.1 * 68 P F950J476MPAAQ2 3.0 20 1.1 ±15 100 P F950J107MPAAQ2 12.6 35 1.2 ±20 100 Q F950J107MPAAQ2 6.3 30 1.1 ±20 100 A F950J107MAAQ2 6.3 30 1.1 ±20 100 A F950J107MAAQ2 6.3 14 0.5 * 100 T F950J107MBAAQ2 6.3 14 0.6 * 100 B F950J107MBAAQ2 6.3 14 0.6 * 100 B F950J107MBAAQ2 6.3 14 0.4 * 150 B F950J107MBAAQ2 13.9 30 0.4 * 220 B F950J337MBAAQ2 13.9 30 0.4 * 330 B F950J337MBAAQ2 10.0 8 3.0 * 15 P F951A106MPAAQ2 1.0 8 3.0 * 22 P F951A26MPAAQ2 1.5 10 3.0 * 22 P F951A26MPAAQ2 1.5 10 3.0 * 22 P F951A26MPAAQ2 2.2 14 3.0 * 22 P F951A26MPAAQ2 2.2 10 2.0 * 33 P F951A36MPAAQ2 2.2 10 1.1 * 47 P F951A36MPAAQ2 2.2 10 2.0 * 22 S F951A226MPAAQ2 2.2 10 2.0 * 22 S F951A326MPAAQ2 2.2 10 1.1 * 47 P F951A36MPAAQ2 3.3 20 3.0 ±15 33 A F951A336MPAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 14 1.1 ±15 47 A F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 48 P951A476MPAAQ2 4.7 10 0.8 * 49 P951A476MPAAQ2 4.7 10 0.8 * 40 P951A476MPAAQ2 4.7 10 0.8 * 410 A F951A476MPAAQ2 4.7 10 0.8 * 410 A F951A476MPAAQ2 4.7 10 0.8 * 410 A F951A476MPAAQ2 4.7 10 0.8		150	В	F950G157MBAAQ2	6.0	14	0.4	*
4V		220	Q	F950G227MQAAQ2	8.8	30	1.5	±20
220 A F950G227MAAQQ2 8.8 25 0.8 ±15 220 B F950G227MAAQQ2 8.8 16 0.4 * 330 A F950G337MAAQQ2 13.2 40 0.8 ±20 330 T F950G337MAAQQ2 13.2 40 0.8 ±20 330 B F950G337MBAQQ2 13.2 40 0.6 ±15 470 B F950G37MAAQQ2 13.2 30 0.6 ±15 470 B F950G477MBAQQ2 18.8 40 0.4 ±20 22 R F950J326MRAQQ2 1.4 20 2.0 ±20 33 P F950J336MPAQQ2 2.1 14 1.1 * 47 P F950J476MPAAQ2 3.0 20 1.1 ±15 68 P F950J476MPAAQ2 3.0 20 1.1 ±15 68 P F950J476MPAAQ2 12.6 35 1.2 ±20 100 P F950J107MPAAQ2 12.6 35 1.2 ±20 100 Q F950J107MPAAQ2 6.3 30 1.1 ±20 100 A F950J107MAAQQ2 6.3 14 0.5 * 100 T F950J107MAAQQ2 6.3 14 0.6 * 100 B F950J107MBAAQQ2 6.3 14 0.6 * 100 B F950J107MBAQQ2 13.9 30 0.4 * 220 B F950J27MBAAQQ 13.9 30 0.4 * 330 B F950J37MBAAQQ 1.0 8 3.0 * 220 B F950J37MBAAQQ 1.0 8 3.0 * 220 B F950J37MBAAQQ 1.0 8 3.0 * 220 B F951A106MPAAQQ 1.0 8 3.0 * 22 P F951A106MPAAQQ 1.0 8 3.0 * 22 P F951A106MPAAQQ 2.2 14 3.0 * 22 P F951A226MPAAQQ 2.2 10 2.0 * 22 S F951A226MPAAQQ 2.2 10 2.0 * 22 S F951A226MPAAQQ 2.2 10 2.0 * 33 P F951A36MPAAQQ 3.3 10 1.1 * 22 A F951A36MPAAQQ 2.2 10 2.0 * 33 P F951A36MPAAQQ 2.2 10 1.1 * 47 P F951A36MPAAQQ 3.3 10 1.1 * 47 P F951A36MPAAQQ 3.3 10 1.1 * 47 P F951A36MPAAQQ 4.7 14 3.0 ±15 47 P F951A36MPAAQQ 4.7 10 0.8 * 47 P F951A476MPAAQQ 4.7 10 0.8 * 47 P F951A476MPAAQQ 4.7 14 1.1 ±15 47 A F951A476MPAAQQ 4.7 14 1.1 ±15 47 A F951A476MPAAQQ 4.7 10 0.8 * 47 P F951A476MBAAQQ 4.7 10 0.8 *	457	220	s	F950G227MSAAQ2	8.8	30	0.8	±15
220	40	220	Α	F950G227MAAAQ2	8.8	25	0.8	±15
330 A F950G337MAAAQ2 13.2 40 0.8 ±20 330 T F950G337MTAAQ2 13.2 40 0.8 ±20 330 B F950G337MBAAQ2 13.2 30 0.6 ±15 470 B F950G477MBAQ2 13.2 30 0.6 ±15 470 B F950J226MRAQQ2 13.2 30 0.4 ±20 22 R F950J226MRAQQ2 1.4 20 2.0 ±20 33 P F950J336MPAAQ2 2.1 14 1.1 * 47 P F950J476MPAAQ2 3.0 20 1.1 ±15 68 P F950J686MPAAQ2 4.3 25 1.2 ±15 100 P F950J107MPAAQ2 12.6 35 1.2 ±20 100 Q F950J107MQAQ2 6.3 30 1.1 ±20 100 A F950J107MAAQ2 6.3 30 1.1 ±20 100 A F950J107MAAQ2 6.3 14 0.5 * 100 T F950J107MAAQ2 6.3 14 0.6 * 100 B F950J107MBAQ2 6.3 14 0.6 * 100 B F950J107MBAQ2 9.5 18 0.4 * 150 B F950J227MBAQ2 13.9 30 0.4 * 150 B F950J37MBAQ2 20.8 35 0.6 ±20 10 R F951A106MRAQ2 1.0 18 3.0 * 15 P F951A166MPAQ2 1.0 8 3.0 * 15 P F951A26MPAQ2 1.0 8 3.0 * 15 P F951A226MPAQ2 2.2 10 2.0 * 22 P F951A226MPAQ2 2.2 10 2.0 * 22 P F951A226MPAQ2 2.2 10 2.0 * 33 P F951A36MPAQ2 3.3 20 3.0 ±15 33 P F951A36MPAQ2 3.3 20 3.0 ±15 33 P F951A36MPAQ2 3.3 10 0.8 * 47 P F951A36MPAQ2 3.3 10 0.8 * 47 P F951A36MPAQ2 4.7 30 3.0 ±20 47 S F951A36MPAQ2 4.7 30 3.0 ±20 47 S F951A36MPAQ2 4.7 10 0.8 * 47 P F951A476MPAQ2 4.7 10 0.8 * 48 P951A476MPAQ2 4.7 10 0.8 * 49 P951A476MPAQ2 4.7 10 0.8 * 40 P951A476MPAQ2 4.7 10 0.8 * 41 P951A476MPAQ2 4.7 10 0.8 * 42 P951A476MPAQ2 4.7 10 0.8 * 43 P951A476MPAQ2 4.7 10 0.8 * 44 P951A476MPAQ2 4.7 10 0.8 * 45 P951A476MPAQ2 4.7 10 0.8 * 46 P951A476MPAQ2 4.7 10 0.8 * 47 P F951A476MPAQ2 4.7 10 0.8 * 48 P951A476MPAQ2 4.7 10 0.6 ±15		220	Т	F950G227MTAAQ2	8.8	25	0.6	*
330		220	В	F950G227MBAAQ2	8.8	16	0.4	*
330		330	Α	F950G337MAAAQ2	13.2	40	0.8	±20
100		330	Т	F950G337MTAAQ2	13.2	40	0.8	±20
22 R F950J226MRAAQ2 1.4 20 2.0 ±20 33 P F950J336MPAQ2 2.1 14 1.1 * 47 P F950J476MPAQQ2 3.0 20 1.1 ±15 68 P F950J686MPAQQ2 4.3 25 1.2 ±15 100 P F950J107MPAQQ2 12.6 35 1.2 ±20 100 Q F950J107MPAQQ2 6.3 30 1.1 ±20 6.3V 100 S F950J107MAAQ2 6.3 20 0.9 ±15 100 A F950J107MAAQ2 6.3 14 0.5 * 100 T F950J107MAAQ2 6.3 14 0.6 * 100 B F950J107MBAQ2 6.3 14 0.6 * 100 B F950J107MBAQ2 6.3 14 0.4 * 150 B F950J157MBAQ2 9.5 18 0.4 * 220 B F950J27MBAQ2 13.9 30 0.4 * 330 B F950J337MBAQ2 13.9 30 0.4 * 330 B F950J337MBAQ2 10.0 8 3.0 * 15 P F951A106MPAAQ2 1.0 8 3.0 * 15 P F951A16MPAAQ2 1.0 8 3.0 * 22 P F951A26MPAAQ2 1.5 10 3.0 * 22 P F951A26MPAAQ2 2.2 14 3.0 * 22 P F951A26MPAAQ2 2.2 10 2.0 * 22 S F951A226MPAAQ2 2.2 10 2.0 * 22 S F951A226MPAAQ2 2.2 10 1.1 * 10V 33 S F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MPAAQ2 3.3 10 1.1 * 10V 33 S F951A336MPAAQ2 3.3 10 1.1 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 48 B F951A686MBAAQ2 6.8 12 0.4 * 49 B F951A686MBAAQ2 6.8 12 0.4 * 40 B F951A107MAAAQ2 10.0 35 1.0 ±15 100 A F951A107MTAAQ2 10.0 20 0.6 ±15		330	В	F950G337MBAAQ2	13.2	30	0.6	±15
33		470	В	F950G477MBAAQ2	18.8	40	0.4	±20
33		22	R	F950.1226MRAAQ2	1 4	20	20	+20
6.3V P F950J476MPAAQ2 3.0 20 1.1 ±15 100 P F950J107MPAAQ2 12.6 35 1.2 ±20 100 Q F950J107MPAAQ2 6.3 30 1.1 ±20 100 A F950J107MSAAQ2 6.3 20 0.9 ±15 100 A F950J107MAAQ2 6.3 14 0.5 * 100 T F950J107MBAAQ2 6.3 14 0.6 * 100 B F950J107MBAAQ2 6.3 14 0.4 * 150 B F950J157MBAQ2 9.5 18 0.4 * 220 B F950J27MBAQ2 13.9 30 0.4 * 330 B F950J37MBAQ2 20.8 35 0.6 ±20 10 R F951A106MRAQ2 1.0 18 3.0 * 15 P F951A106MPAQ2 1.0 8 3.0 * 15 P F951A26MPAQ2 1.5 10 3.0 * 22 P F951A226MPAQ2 2.2 10 2.0 * 22 P F951A226MPAQ2 2.2 10 2.0 * 22 P F951A226MSAQ2 2.2 10 1.1 * 10 R F951A336MPAAQ2 2.2 10 1.1 * 10 R F951A36MPAQ2 3.3 20 3.0 ±15 33 P F951A336MPAQ2 3.3 18 3.0 ±15 33 P F951A336MPAQ2 3.3 10 1.1 * 10V 33 S F951A336MPAQ2 3.3 10 1.1 * 10V 33 S F951A336MPAQ2 4.7 30 3.0 ±20 47 P F951A476MPAQ2 4.7 10 0.8 * 47 P F951A476MPAQ2 4.7 12 0.8 * 47 P F951A476MPAQ2 4.7 12 0.8 * 47 B F951A476MBAQ2 4.7 12 0.8 * 48 B F951A686MBAQ2 6.8 12 0.4 * 49 B F951A07MAAQ2 10.0 35 1.0 ±15 100 A F951A107MAAQ2 10.0 35 1.0 ±15						l	l	
68 P F950J686MPAAQ2 4.3 25 1.2 ±15 100 P F950J107MPAAQ2 12.6 35 1.2 ±20 100 Q F950J107MQAAQ2 6.3 30 1.1 ±20 100 A F950J107MSAAQ2 6.3 20 0.9 ±15 100 A F950J107MAAQ2 6.3 14 0.5 * 100 T F950J107MTAAQ2 6.3 14 0.6 * 100 B F950J107MBAQ2 6.3 14 0.4 * 150 B F950J157MBAQ2 9.5 18 0.4 * 220 B F950J27MBAQ2 13.9 30 0.4 * 330 B F950J37MBAQ2 20.8 35 0.6 ±20 10 R F951A106MRAQ2 1.0 18 3.0 * 15 P F951A106MPAQ2 1.0 8 3.0 * 15 P F951A26MPAQ2 1.5 10 3.0 * 22 P F951A26MPAQ2 2.2 14 3.0 * 22 P F951A226MPAQ2 2.2 10 2.0 * 22 P F951A226MQAQ2 2.2 10 2.0 * 22 P F951A226MAAQ2 2.2 10 1.1 * 22 A F951A26MAAQ2 2.2 10 1.1 * 22 A F951A36MAAQ2 3.3 20 3.0 ±15 33 P F951A336MPAAQ2 3.3 10 1.1 * 33 P F951A336MPAAQ2 3.3 10 1.1 * 33 A F951A336MPAAQ2 4.7 14 1.1 ±15 47 A F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 T F951A476MPAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 48 B F951A686MBAAQ2 6.8 12 0.4 * 49 B F951A07MAAAQ2 10.0 35 1.0 ±15		1					l	+15
6.3V 100						_		_
6.3V 100 Q F950J107MQAAQ2 6.3 30 1.1 ±20 100 S F950J107MSAAQ2 6.3 20 0.9 ±15 100 A F950J107MAAAQ2 6.3 14 0.5 * 100 T F950J107MTAAQ2 6.3 14 0.6 * 100 B F950J107MBAAQ2 6.3 14 0.4 * 150 B F950J157MBAAQ2 9.5 18 0.4 * 220 B F950J227MBAAQ2 13.9 30 0.4 * 330 B F950J337MBAAQ2 20.8 35 0.6 ±20 10 R F951A106MRAAQ2 1.0 18 3.0 ±20 10 P F951A106MPAAQ2 1.0 8 3.0 * 15 P F951A26MPAAQ2 1.5 10 3.0 * 15 P F951A26MPAAQ2 1.5 10 3.0 * 22 P F951A226MQAAQ2 2.2 14 3.0 * 22 P F951A226MQAAQ2 2.2 14 3.0 * 22 P F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MQAAQ2 2.2 10 1.1 * 22 A F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MPAAQ2 3.3 10 1.1 * 33 S F951A336MPAAQ2 3.3 10 1.1 * 33 A F951A336MPAAQ2 3.3 10 1.1 * 33 A F951A336MPAAQ2 4.7 30 3.0 ±20 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MPAAQ2 4.7 14 1.1 ±15 47 A F951A476MPAAQ2 4.7 10 0.8 * 47 T F951A476MPAAQ2 4.7 10 0.8 * 47 B F951A476MPAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15					_			
6.3V 100					_			
100	6.3V							
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100 B F950J107MBAAQ2 6.3 14 0.4 * 150 B F950J157MBAAQ2 9.5 18 0.4 * 220 B F950J227MBAAQ2 13.9 30 0.4 * 330 B F950J337MBAAQ2 20.8 35 0.6 ±20 10 R F951A106MRAAQ2 1.0 18 3.0 ±20 10 P F951A156MPAAQ2 1.0 8 3.0 * 15 P F951A256MPAAQ2 1.5 10 3.0 * 22 P F951A226MPAAQ2 2.2 14 3.0 * 22 Q F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MQAAQ2 2.2 10 1.1 * 22 A F951A236MPAAQ2 2.2 10 1.1 * 22 A F951A336MPAAQ2 3.3 20 3.0 ±15 33 P F951A336MPAAQ2 3.3 18 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 A F951A336MAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 1.1 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MPAAQ2 4.7 10 0.8 * 47 P F951A476MPAAQ2 4.7 10 0.8 * 47 A F951A476MPAAQ2 4.7 10 0.8 * 47 B F951A476MPAAQ2 4.7 12 0.8 * 47 B F951A476MPAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MAAAQ2 10.0 35 1.0 ±15							l	*
150								
220 B								
330 B F950J337MBAAQ2 20.8 35 0.6 ±20								*
10 P F951A106MPAAQ2 1.0 8 3.0 * 15 P F951A156MPAAQ2 1.5 10 3.0 * 22 P F951A226MPAAQ2 2.2 14 3.0 * 22 Q F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MSAAQ2 2.2 10 1.1 * 22 A F951A226MAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 S F951A336MQAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 1.1 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MPAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MAAQ2 10.0 20 0.6 ±15								±20
15 P F951A156MPAAQ2 1.5 10 3.0 * 22 P F951A226MPAAQ2 2.2 14 3.0 * 22 Q F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MSAAQ2 2.2 10 1.1 * 22 A F951A226MAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MSAAQ2 3.3 10 1.1 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MPAAQ2 4.7 14 1.1 ±15 47 A F951A476MSAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MPAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MAAQ2 10.0 20 0.6 ±15		10	R	F951A106MRAAQ2	1.0	18	3.0	±20
22 P F951A226MPAAQ2 2.2 14 3.0 * 22 Q F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MSAAQ2 2.2 10 1.1 * 22 A F951A226MAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A36MSAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MSAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		10	Р	F951A106MPAAQ2	1.0	8	3.0	*
22 Q F951A226MQAAQ2 2.2 10 2.0 * 22 S F951A226MSAAQ2 2.2 10 1.1 * 22 A F951A226MAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MSAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 48 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		15	Р	F951A156MPAAQ2	1.5	10	3.0	*
22 S F951A226MSAAQ2 2.2 10 1.1 * 22 A F951A226MAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 A F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		22	Р	F951A226MPAAQ2	2.2	14	3.0	*
22 A F951A226MAAAQ2 2.2 6 0.9 * 33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 10V 33 S F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 10 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		22	Q	F951A226MQAAQ2	2.2	10	2.0	*
33 P F951A336MPAAQ2 3.3 20 3.0 ±15 33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 10V 33 S F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		22	s	F951A226MSAAQ2	2.2	10	1.1	*
33 Q F951A336MQAAQ2 3.3 18 3.0 ±15 33 S F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		22	Α	F951A226MAAAQ2	2.2	6	0.9	*
10V 33 S F951A336MSAAQ2 3.3 10 1.1 * 33 A F951A336MAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		33	Р	F951A336MPAAQ2	3.3	20	3.0	±15
33 A F951A336MAAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		33	Q	F951A336MQAAQ2	3.3	18	3.0	±15
33 A F951A336MAAAQ2 3.3 10 0.8 * 47 P F951A476MPAAQ2 4.7 30 3.0 ±20 47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 12 0.8 * 48 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15	10\/	33	s	F951A336MSAAQ2	3.3	10	1.1	*
47 S F951A476MSAAQ2 4.7 14 1.1 ±15 47 A F951A476MAAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		33	Α	F951A336MAAAQ2	3.3	10	0.8	*
47 A F951A476MAAAQ2 4.7 10 0.8 * 47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		1	Р					±20
47 T F951A476MTAAQ2 4.7 12 0.8 * 47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		47	S	F951A476MSAAQ2	4.7	14	1.1	±15
47 B F951A476MBAAQ2 4.7 8 0.4 * 68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		47	Α	F951A476MAAAQ2	4.7	10	0.8	*
68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		47	Т	F951A476MTAAQ2	4.7	12	0.8	*
68 B F951A686MBAAQ2 6.8 12 0.4 * 100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15		47	В	F951A476MBAAQ2	4.7	8	0.4	*
100 A F951A107MAAAQ2 10.0 35 1.0 ±15 100 T F951A107MTAAQ2 10.0 20 0.6 ±15			В					*
100 T F951A107MTAAQ2 10.0 20 0.6 ±15		1					_	±15
			Т					
		100	В	F951A107MBAAQ2	10.0	14		

Rated Volt	Rated Capacitance (µF)	Case code	Part Number	*2 Leakage Current (µA)	Disspation Factor (%@120Hz)	ESR (Ω@100kHz)	*1 ∆C/C (%)
	4.7	R	F951C475MRAAQ2	0.8	12	6.0	±20
	4.7	Р	F951C475MPAAQ2	0.8	10	4.0	*
	10	Р	F951C106MPAAQ2	1.6	10	4.0	*
	10	Q	F951C106MQAAQ2	1.6	8	3.0	*
	10	S	F951C106MSAAQ2	1.6	8	2.0	*
	10	Α	F951C106MAAAQ2	1.6	6	1.4	*
	15	S	F951C156MSAAQ2	2.4	8	2.0	*
16V	15	Α	F951C156MAAAQ2	2.4	8	1.4	*
100	22	Q	F951C226MQAAQ2	3.5	12	3.0	*
	22	S	F951C226MSAAQ2	3.5	10	2.0	±15
	22	Α	F951C226MAAAQ2	3.5	8	1.4	*
	22	Т	F951C226MTAAQ2	3.5	8	1.4	*
	22	В	F951C226MBAAQ2	3.5	6	0.5	*
	33	Т	F951C336MTAAQ2	5.3	11	1.5	±10
	33	В	F951C336MBAAQ2	5.3	8	0.5	*
	47	В	F951C476MBAAQ2	7.5	10	0.6	*
	2.2	Р	F951D225MPAAQ2	0.5	6	6.0	*
	4.7	S	F951D475MSAAQ2	0.9	8	4.0	*
	4.7	Α	F951D475MAAAQ2	0.9	6	1.5	*
20V	10	S	F951D106MSAAQ2	2.0	10	4.0	±10
	10	Α	F951D106MAAAQ2	2.0	8	1.5	*
	10	В	F951D106MBAAQ2	2.0	6	0.8	*
	22	В	F951D226MBAAQ2	4.4	8	0.8	*
	1	R	F951E105MRAAQ2	0.5	10	10.0	±10
	2.2	R	F951E225MRAAQ2	0.6	15	15.0	±20
	2.2	Р	F951E225MPAAQ2	0.6	8	6.0	±15
	4.7	Р	F951E475MPAAQ2	1.2	10	8.0	±15
25V	4.7	Q	F951E475MQAAQ2	1.2	10	4.0	±15
	4.7	S	F951E475MSAAQ2	1.2	8	4.0	*
	4.7	Α	F951E475MAAAQ2	1.2	8	2.0	*
	10	Α	F951E106MAAAQ2	2.5	12	2.0	±15
	10	В	F951E106MBAAQ2	2.5	6	0.9	*
	1	Р	F951V105MPAAQ2	0.5	8	10.0	±10
35V	1	S	F951V105MSAAQ2	0.5	6	8.0	*
35 7	2.2	Α	F951V225MAAAQ2	0.8	6	4.4	*
	4.7	В	F951V475MBAAQ2	1.7	6	1.6	*

^{**} In case of capacitance tolerance $\pm 10\%$ type, K will be put at 9th digit of type numbering system.

^{*1 : ∆}C/C Marked "*"

1. AO/O Marked	
I t e m	P·Q·S·A·T·B Case (%)
Damp Heat	±10
Tempereature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10

^{*2 :} Leakage Current After 1 minute's application of rated voltage, leakage current at 20°C.