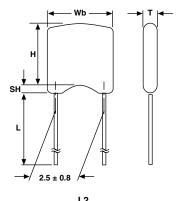


COMPLIANT

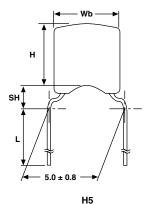


# **Multilayer Ceramic Dipped Radial K10 Capacitors**

#### **DIMENSIONS**

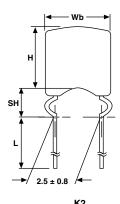


Component outline for lead spacing 2.5 mm  $\pm$  0.8 mm (straight leads)

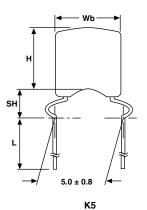


Component outline for lead spacing 5.0 mm  $\pm$  0.8 mm (flat bent leads)

#### L2 and H5 are preferred styles



Component outline for lead spacing 2.5 mm ± 0.8 mm (outside kink)



Component outline for lead spacing 5.0 mm ± 0.8 mm (outside kink)

CAPACIT	CAPACITOR DIMENSIONS AND WEIGHT in millimeter (inches)							
SIZE	34/1-		MAX. SEATING HEIGHT (SH)					WEIGHT
SIZE	Wb <sub>max</sub> .	H <sub>max</sub> .	I max.	L2	H5	K2	K5	(g)
10	3.6 (0.142)	3.6 (0.142)	2.3 (0.090)	1.58 (0.062)	2.54 (0.100)	3.50 (0.140)	3.50 (0.140)	≈ 0.10

#### Note

- Bulk packed types have a standard lead length L = 25.4 mm (1.0") minimum
- Thickness is defined as "T"

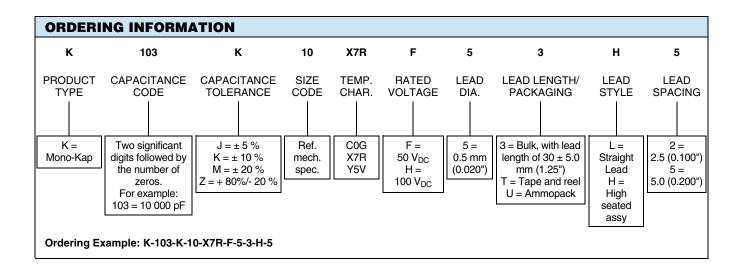
# Mono-Kap

## Vishay

### Multilayer Ceramic Dipped Radial K10 Capacitors



QUICK REFERENCE DATA						
DESCRIPTION	VALUE					
Capacitance range	10 pF to 1000 pF 100 pF to 0.1 μF 0.01 μF to 0.15 μF				0.01 μF to 0.15 μF	
Rated DC voltage	50 V	100 V	50 V	100 V	50 V	
Tolerance on capacitance ± 5 %, ± 10 %		± 10 %,	± 20 %	+ 80 %/- 20 %		
Dielectric Code	ode C0G (NP0)		X	7R	Y5V	



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### Multilayer Ceramic Dipped Radial K10 Capacitors

#### **CAPACITANCE RANGE CHART**

COG (NPO) DIELECTRIC				
SI	ZE	1	0	
RATED VOLTAGE		50	100	
VALUE	CODE	50	100	
10 pF	100	•	•	
12 pF	120	•	•	
15 pF	150	•	•	
18 pF	180	•	•	
22 pF	220	•	•	
27 pF	270	•	•	
33 pF	330	•	•	
39 pF	390	•	•	
47 pF	470	•	•	
56 pF	560	•	•	
68 pF	680	•	•	
82 pF	820	•	•	
100 pF	101	•	•	
120 pF	121	•	•	
150 pF	151	•	•	
180 pF	181	•	•	
220 pF	221	•	•	
270 pF	271	•	•	
330 pF	331	•	•	
390 pF	391	•	•	
470 pF	471	•	•	
560 pF	561	•	•	
680 pF	681	•		
820 pF	821	•		
1000 pF	102	•		
1200 pF	122			
1500 pF	152			
1800 pF	182			
2200 pF	222			
2700 pF	272			
3300 pF	332			
3900 pF	392			
4700 pF	472			
5600 pF	562			
6800 pF	682			
8200 pF	822			
0.01 μF	103			

Y5V DIELECTRIC					
SI	ZE	10			
RATED V	OLTAGE	50			
VALUE	CODE	30			
0.01 μF	103	•			
0.015 μF	153	•			
0.022 μF	223	•			
0.033 μF	333	•			
0.047 μF	473	•			
0.068 μF	683	•			
0.10 μF	104	•			
0.15 μF	154	•			
0.22 μF	224				
0.33 μF	334				
0.47 μF	474				
0.68 μF	684				
1.0 μF	105				

X7R DIE	X7R DIELECTRIC				
SI	ZE	1	0		
	OLTAGE		-		
VALUE	CODE	50	100		
100 pF	101	•	•		
120 pF	121	•	•		
150 pF	151	•	•		
180 pF	181	•	•		
220 pF	221	•	•		
270 pF	271	•	•		
330 pF	331	•	•		
390 pF	391	•	•		
470 pF	471	•	•		
560 pF	561	•	•		
680 pF	681	•	•		
820 pF	821	•	•		
1000 pF	102	•	•		
1200 pF	122	•	•		
1500 pF	152	•	•		
1800 pF	182	•	•		
2200 pF	222	•	•		
2700 pF	272	•	•		
3300 pF	332	•	•		
3900 pF	392	•	•		
4700 pF	472	•	•		
5600 pF	562	•	•		
6800 pF	682	•	•		
8200 pF	822	•	•		
0.01 μF	103	•	•		
0.012 μF	123	•			
0.015 μF	153	•			
0.018 μF	183	•			
0.022 μF	223	•			
0.027 μF	273	•			
0.033 μF	333	•			
0.039 μF	393	•			
0.047 μF	473	•			
0.056 μF	563	•			
0.068 μF	683	•			
0.082 μF	823	•			
0.10 μF	104	•			
0.12 μF	124				
0.15 μF	154				
0.22 μF	224				
0.33 μF	334				
0.47 μF	474				
0.68 μF	684				
1.0 μF	105				

# Mono-Kap

# Vishay

### Multilayer Ceramic Dipped Radial K10 Capacitors



### PART NUMBER LISTING - if not in range chart, please contact <a href="mailto:cml@vishay.com">cml@vishay.com</a>

MONO-KAP Y5V - 50 V <sub>DC</sub> CLEAR TEXT CODE					
CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	+ 80 %/- 20 % TOLERANCE 13 <sup>th</sup> digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)		
10 000		K103Z10Y5VF5.L2	2.5 mm (0.10)		
15 000		K153Z10Y5VF5.H5	5.0 mm (0.20)		
15 000		K153Z10Y5VF5.L2	2.5 mm (0.10)		
22 000		K223Z10Y5VF5.H5	5.0 mm (0.20)		
22 000		K223Z10Y5VF5.L2	2.5 mm (0.10)		
33 000		K333Z10Y5VF5.H5	5.0 mm (0.20)		
33 000		K333Z10Y5VF5.L2	2.5 mm (0.10)		
47 000	50	K473Z10Y5VF5.H5	5.0 mm (0.20)		
47 000		K473Z10Y5VF5.L2	2.5 mm (0.10)		
68 000		K683Z10Y5VF5.H5	5.0 mm (0.20)		
68 000		K683Z10Y5VF5.L2	2.5 mm (0.10)		
100 000		K104Z10Y5VF5.H5	5.0 mm (0.20)		
100 000		K104Z10Y5VF5.L2	2.5 mm (0.10)		
150 000		K154Z10Y5VF5.H5	5.0 mm (0.20)		
150 000		K154Z10Y5VF5.L2	2.5 mm (0.10)		

CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	10 % TOLERANCE 13 <sup>th</sup> digit <sup>(1)</sup> (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
100		K101K10X7RF5.L2	2.5 mm (0.20)
100		K101K10X7RF5.H5	5.0 mm (0.20)
120		K121K10X7RF5.L2	2.5 mm (0.10)
120		K121K10X7RF5.H5	5.0 mm (0.20)
150		K151K10X7RF5.L2	2.5 mm (0.10)
150		K151K10X7RF5.H5	5.0 mm (0.20)
180		K181K10X7RF5.L2	2.5 mm (0.10)
180		K181K10X7RF5.H5	5.0 mm (0.20)
220		K221K10X7RF5.L2	2.5 mm (0.10)
220		K221K10X7RF5.H5	5.0 mm (0.20)
270		K271K10X7RF5.L2	2.5 mm (0.10)
270		K271K10X7RF5.H5	5.0 mm (0.20)
330		K331K10X7RF5.L2	2.5 mm (0.10)
330		K331K10X7RF5.H5	5.0 mm (0.20)
390	50	K391K10X7RF5.L2	2.5 mm (0.10)
390	50	K391K10X7RF5.H5	5.0 mm (0.20)
470		K471K10X7RF5.L2	2.5 mm (0.10)
470		K471K10X7RF5.H5	5.0 mm (0.20)
560		K561K10X7RF5.L2	2.5 mm (0.10)
560		K561K10X7RF5.H5	5.0 mm (0.20)
680		K681K10X7RF5.L2	2.5 mm (0.10)
680		K681K10X7RF5.H5	5.0 mm (0.20)
820		K821K10X7RF5.L2	2.5 mm (0.10)
820		K821K10X7RF5.H5	5.0 mm (0.20)
1000		K102K10X7RF5.L2	2.5 mm (0.10)
1000		K102K10X7RF5.H5	5.0 mm (0.20)
1200		K122K10X7RF5.L2	2.5 mm (0.10)
1200		K122K10X7RF5.H5	5.0 mm (0.20)
1500		K152K10X7RF5.L2	2.5 mm (0.10)
1500		K152K10X7RF5.H5	5.0 mm (0.20)

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## Multilayer Ceramic Dipped Radial K10 Capacitors

MONO-KAP X7R - 50	MONO-KAP X7R - 50 V <sub>DC</sub> CLEAR TEXT CODE					
CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	10 % TOLERANCE 13 <sup>th</sup> digit <sup>(1)</sup>	LEAD SPACING			
		(T = Reel, U = Ammo, 3 = Bulk)	mm (inch)			
1800		K182K10X7RF5.L2	2.5 mm (0.10)			
1800		K182K10X7RF5.H5	5.0 mm (0.20)			
2200		K222K10X7RF5.L2	2.5 mm (0.10)			
2200		K222K10X7RF5.H5	5.0 mm (0.20)			
2700		K272K10X7RF5.L2	2.5 mm (0.10)			
2700		K272K10X7RF5.H5	5.0 mm (0.20)			
3300		K332K10X7RF5.L2	2.5 mm (0.10)			
3300		K332K10X7RF5.H5	5.0 mm (0.20)			
3900		K392K10X7RF5.L2	2.5 mm (0.10)			
3900		K392K10X7RF5.H5	5.0 mm (0.20)			
4700		K472K10X7RF5.L2	2.5 mm (0.10)			
4700		K472K10X7RF5.H5	5.0 mm (0.20)			
5600		K562K10X7RF5.L2	2.5 mm (0.10)			
5600		K562K10X7RF5.H5	5.0 mm (0.20)			
6800		K682K10X7RF5.L2	2.5 mm (0.10)			
6800		K682K10X7RF5.H5	5.0 mm (0.20)			
8200		K822K10X7RF5.L2	2.5 mm (0.10)			
8200		K822K10X7RF5.H5	5.0 mm (0.20)			
10 000		K103K10X7RF5.L2	2.5 mm (0.10)			
10 000		K103K10X7RF5.H5	5.0 mm (0.20)			
12 000		K123K10X7RF5.L2	2.5 mm (0.10)			
12 000		K123K10X7RF5.H5	5.0 mm (0.20)			
15 000		K153K10X7RF5.L2	2.5 mm (0.10)			
15 000		K153K10X7RF5.H5	5.0 mm (0.20)			
18 000		K183K10X7RF5.L2	2.5 mm (0.10)			
18 000	50	K183K10X7RF5.H5	5.0 mm (0.20)			
22 000		K223K10X7RF5.L2	2.5 mm (0.10)			
22 000		K223K10X7RF5.H5	5.0 mm (0.20)			
27 000		K273K10X7RF5.L2	2.5 mm (0.10)			
27 000		K273K10X7RF5.H5	5.0 mm (0.20)			
33 000		K333K10X7RF5.L2	2.5 mm (0.10)			
33 000		K333K10X7RF5.H5	5.0 mm (0.20)			
39 000		K393K10X7RF5.L2	2.5 mm (0.10)			
39 000		K393K10X7RF5.H5	5.0 mm (0.20)			
39 000		K393K10X7RF5.L2	2.5 mm (0.10)			
39 000		K393K10X7RF5.H5	5.0 mm (0.20)			
47 000		K473K10X7RF5.H5	2.5 mm (0.10)			
47 000		K473K10X7RF5.L2 K473K10X7RF5.H5	5.0 mm (0.20)			
47 000		K473K10X7RF5.H5	2.5 mm (0.10)			
47 000		K473K10X7RF5.L2 K473K10X7RF5.H5	5.0 mm (0.20)			
56 000		K563K10X7RF5.H5	2.5 mm (0.10)			
56 000		K563K10X7RF5.L2	5.0 mm (0.20)			
56 000		K563K10X7RF5.H5	2.5 mm (0.10)			
56 000		K563K10X7RF5.H5	5.0 mm (0.20)			
68 000 68 000		K683K10X7RF5.L2	2.5 mm (0.10)			
82 000		K683K10X7RF5.H5 K823K10X7RF5.L2	5.0 mm (0.20)			
			2.5 mm (0.10)			
82 000		K823K10X7RF5.H5	5.0 mm (0.20)			
100 000		K104K10X7RF5.L2	2.5 mm (0.10)			
100 000		K104K10X7RF5.H5	5.0 mm (0.20)			

#### Note

(1) 20 % tolerance available

# Vishay

## Multilayer Ceramic Dipped Radial K10 Capacitors



		5 % TOLERANCE	LEAD SPACING
CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	13 <sup>th</sup> digit (T = Reel, U = Ammo, 3 = Bulk)	mm (inch)
10		K100J10C0GF5.L2	2.5 mm (0.10)
10		K100J10C0GF5.H5	5.0 mm (0.20)
12		K120J10C0GF5.L2	2.5 mm (0.10)
12		K120J10C0GF5.H5	5.0 mm (0.20)
15		K150J10C0GF5.L2	2.5 mm (0.10)
15		K150J10C0GF5.H5	5.0 mm (0.20)
18		K180J10C0GF5.L2	2.5 mm (0.10)
18		K180J10C0GF5.H5	5.0 mm (0.20)
22		K220J10C0GF5.L2	2.5 mm (0.10)
22		K220J10C0GF5.H5	5.0 mm (0.20)
27		K270J10C0GF5.L2	2.5 mm (0.10)
27		K270J10C0GF5.H5	5.0 mm (0.20)
33		K330J10C0GF5.L2	2.5 mm (0.10)
33		K330J10C0GF5.H5	5.0 mm (0.20)
39	-	K390J10C0GF5.L2	2.5 mm (0.10)
39	-	K390J10C0GF5.L2 K390J10C0GF5.H5	5.0 mm (0.20)
47		K470J10C0GF5.L2	2.5 mm (0.10)
47	-	K470J10C0GF5.L2 K470J10C0GF5.H5	5.0 mm (0.20)
	-		, ,
56	-	K560J10C0GF5.L2	2.5 mm (0.10)
56	-	K560J10C0GF5.H5	5.0 mm (0.20)
68		K680J10C0GF5.L2	2.5 mm (0.10)
68		K680J10C0GF5.H5	5.0 mm (0.20)
82		K820J10C0GF5.L2	2.5 mm (0.10)
82		K820J10C0GF5.H5	5.0 mm (0.20)
100	50	K101J10C0GF5.L2	2.5 mm (0.10)
100		K101J10C0GF5.H5	5.0 mm (0.20)
120		K121J10C0GF5.L2	2.5 mm (0.10)
120		K121J10C0GF5.H5	5.0 mm (0.20)
150		K151J10C0GF5.L2	2.5 mm (0.10)
150		K151J10C0GF5.H5	5.0 mm (0.20)
180		K181J10C0GF5.L2	2.5 mm (0.10)
180		K181J10C0GF5.H5	5.0 mm (0.20)
220		K221J10C0GF5.L2	2.5 mm (0.10)
220		K221J10C0GF5.H5	5.0 mm (0.20)
270		K271J10C0GF5.L2	2.5 mm (0.10)
270		K271J10C0GF5.H5	5.0 mm (0.20)
330		K331J10C0GF5.L2	2.5 mm (0.10)
330		K331J10C0GF5.H5	5.0 mm (0.20)
390		K391J10C0GF5.L2	2.5 mm (0.10)
390		K391J10C0GF5.H5	5.0 mm (0.20)
470		K471J10C0GF5.L2	2.5 mm (0.10)
470		K471J10C0GF5.H5	5.0 mm (0.20)
560		K561J10C0GF5.L2	2.5 mm (0.10)
560		K561J10C0GF5.H5	5.0 mm (0.20)
680		K681J10C0GF5.L2	2.5 mm (0.10)
680		K681J10C0GF5.H5	5.0 mm (0.20)
820		K821J10C0GF5.L2	2.5 mm (0.10)
820	ľ	K821J10C0GF5.H5	5.0 mm (0.20)
1000	ŀ	K102J10C0GF5.L2	2.5 mm (0.10)
1000		K102J10C0GF5.H5	5.0 mm (0.20)

#### Note

(1) 10 % tolerance available





## Multilayer Ceramic Dipped Radial K10 Capacitors

CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	10 % TOLERANCE 13 <sup>th</sup> digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)
100		K101K10X7RH5.L2	2.5 mm (0.10)
100		K101K10X7RH5.H5	5.0 mm (0.20)
120		K121K10X7RH5.L2	2.5 mm (0.10)
120		K121K10X7RH5.H5	5.0 mm (0.20)
150		K151K10X7RH5.L2	2.5 mm (0.10)
150		K151K10X7RH5.H5	5.0 mm (0.20)
180		K181K10X7RH5.L2	2.5 mm (0.10)
180		K181K10X7RH5.H5	5.0 mm (0.20)
220		K221K10X7RH5.L2	2.5 mm (0.10)
220		K221K10X7TH15.L2	5.0 mm (0.20)
270		K271K10X7H15.H5	2.5 mm (0.10)
270		K271K10X7TH15.L2	5.0 mm (0.20)
330		K331K10X7RH5.L2	2.5 mm (0.10)
330		K331K10X7RH5.L2	5.0 mm (0.20)
390		K391K10X7RH5.L2	2.5 mm (0.10)
390		K391K10X7RH5.H5	5.0 mm (0.20)
470		K471K10X7RH5.L2	2.5 mm (0.10)
470		K471K10X7RH5.L2 K471K10X7RH5.H5	5.0 mm (0.20)
			2.5 mm (0.10)
560		K561K10X7RH5.L2	, ,
560		K561K10X7RH5.H5	5.0 mm (0.20)
680		K681K10X7RH5.L2	2.5 mm (0.10)
680		K681K10X7RH5.H5	5.0 mm (0.20)
820		K821K10X7RH5.L2	2.5 mm (0.10)
820		K821K10X7RH5.H5	5.0 mm (0.20)
1000	100	K102K10X7RH5.L2	2.5 mm (0.10)
1000		K102K10X7RH5.H5	5.0 mm (0.20)
1200		K122K10X7RH5.L2	2.5 mm (0.10)
1200		K122K10X7RH5.H5	5.0 mm (0.20)
1500		K152K10X7RH5.L2	2.5 mm (0.10)
1500		K152K10X7RH5.H5	5.0 mm (0.20)
1800		K182K10X7RH5.L2	2.5 mm (0.10)
1800		K182K10X7RH5.H5	5.0 mm (0.20)
2200		K222K10X7RH5.L2	2.5 mm (0.10)
2200		K222K10X7RH5.H5	5.0 mm (0.20)
2700		K272K10X7RH5.L2	2.5 mm (0.10)
2700		K272K10X7RH5.H5	5.0 mm (0.20)
3300		K332K10X7RH5.L2	2.5 mm (0.10)
3300		K332K10X7RH5.H5	5.0 mm (0.20)
3900		K392K10X7RH5.L2	2.5 mm (0.10)
3900		K392K10X7RH5.H5	5.0 mm (0.20)
4700		K472K10X7RH5.L2	2.5 mm (0.10)
4700		K472K10X7RH5.H5	5.0 mm (0.20)
5600		K562K10X7RH5.L2	2.5 mm (0.10)
5600		K562K10X7RH5.H5	5.0 mm (0.20)
6800		K682K10X7RH5.L2	2.5 mm (0.10)
6800		K682K10X7RH5.H5	5.0 mm (0.20)
8200		K822K10X7RH5.L2	2.5 mm (0.10)
8200		K822K10X7RH5.H5	5.0 mm (0.20)
10 000		K103K10X7RH5.L2	2.5 mm (0.10)
10 000		K103K10X7RH5.H5	5.0 mm (0.20)

#### Note

(1) 20 % tolerance available

# Vishay

## Multilayer Ceramic Dipped Radial K10 Capacitors



MONO-KAP COG - 100 V <sub>DC</sub> CLEAR TEXT CODE					
CAPACITANCE (pF)	RATED VOLTAGE (V <sub>DC</sub> )	5 % TOLERANCE 13 <sup>th</sup> digit (T = Reel, U = Ammo, 3 = Bulk)	LEAD SPACING mm (inch)		
10		K100J10C0GH5.L2	2.5 mm (0.10)		
10		K100J10C0GH5.H5	5.0 mm (0.20)		
12		K120J10C0GH5.L2	2.5 mm (0.10)		
12		K120J10C0GH5.H5	5.0 mm (0.20)		
15		K150J10C0GH5.L2	2.5 mm (0.10)		
15		K150J10C0GH5.H5	5.0 mm (0.20)		
18		K180J10C0GH5.L2	2.5 mm (0.10)		
18		K180J10C0GH5.H5	5.0 mm (0.20)		
22		K220J10C0GH5.L2	2.5 mm (0.10)		
22		K220J10C0GH5.H5	5.0 mm (0.20)		
27		K270J10C0GH5.L2	2.5 mm (0.10)		
27		K270J10C0GH5.H5	5.0 mm (0.20)		
27		K270J10C0GH5.L2	2.5 mm (0.10)		
27		K270J10C0GH5.H5	5.0 mm (0.20)		
33		K330J10C0GH5.L2	2.5 mm (0.10)		
33		K330J10C0GH5.H5	5.0 mm (0.20)		
39		K390J10C0GH5.L2	2.5 mm (0.10)		
39		K390J10C0GH5.H5	5.0 mm (0.20)		
47		K470J10C0GH5.L2	2.5 mm (0.10)		
47		K470J10C0GH5.H5	5.0 mm (0.20)		
56		K560J10C0GH5.L2	2.5 mm (0.10)		
56		K560J10C0GH5.H5	5.0 mm (0.20)		
68	400	K680J10C0GH5.L2	2.5 mm (0.10)		
68	100	K680J10C0GH5.H5	5.0 mm (0.20)		
82		K820J10C0GH5.L2	2.5 mm (0.10)		
82		K820J10C0GH5.H5	5.0 mm (0.20)		
100		K101J10C0GH5.L2	2.5 mm (0.10)		
100		K101J10C0GH5.H5	5.0 mm (0.20)		
120		K121J10C0GH5.L2	2.5 mm (0.10)		
120		K121J10C0GH5.H5	5.0 mm (0.20)		
150		K151J10C0GH5.L2	2.5 mm (0.10)		
150		K151J10C0GH5.H5	5.0 mm (0.20)		
180		K181J10C0GH5.L2	2.5 mm (0.10)		
180		K181J10C0GH5.H5	5.0 mm (0.20)		
220		K221J10C0GH5.L2	2.5 mm (0.10)		
220		K221J10C0GH5.H5	5.0 mm (0.20)		
270		K271J10C0GH5.L2	2.5 mm (0.10)		
270		K271J10C0GH5.H5	5.0 mm (0.20)		
330		K331J10C0GH5.L2	2.5 mm (0.10)		
330		K331J10C0GH5.H5	5.0 mm (0.20)		
390		K391J10C0GH5.L2	2.5 mm (0.10)		
390		K391J10C0GH5.H5	5.0 mm (0.20)		
470		K471J10C0GH5.L2	2.5 mm (0.10)		
470		K471J10C0GH5.H5	5.0 mm (0.20)		
560		K561J10C0GH5.L2	2.5 mm (0.10)		
560		K561J10C0GH5.H5	5.0 mm (0.20)		

#### Note

(1) 10 % tolerance available





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