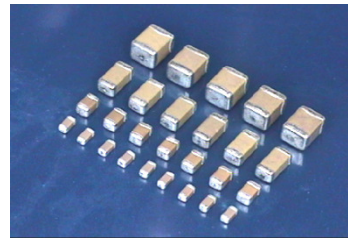


HCC Series - High Capacitance MLCC



Multilayer Ceramic Chip Capacitors
[High Capacitance MLCC – 1.0uF and above]

HCC Series



◆ Features

- ❑ Surface mount suitable for wave and reflow soldering
- ❑ High reliability
- ❑ Small size and high capacitance value
- ❑ Excellent high frequency characteristics
- ❑ RoHS compliant

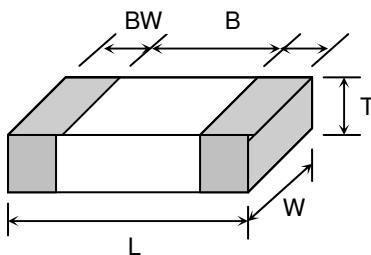
◆ Applications

- ❑ Ideal for smoothing and decoupling circuits
- ❑ Suitable for DC-DC converter, personal computer and peripherals, telecommunication and general electronic equipment

◆ Summary of Specifications

Operation Temperature	NP0 & X7R : -55 °C ~ +125 °C , X6S : -55 °C ~ +105 °C ; X5R : -55 °C ~ +85 °C , Y5V : -30 °C ~ +85 °C
Rated Voltage	4.0Vdc to 50Vdc
Temperature Coefficient	X7R : ≤ ± 15% , -55 °C ~ +125 °C (EIA Class II) X6S : ≤ ± 22% , -55 °C ~ +105 °C (EIA Class II) X5R : ≤ ± 15% , -55 °C ~ +85 °C (EIA Class II) Y5V : +22%/-82% , -30 °C ~ +85 °C (EIA Class II)
Dissipation Factor	X7R, X5R, X6S : Max. 0.15; Y5V: Max 0.2
Insulation Resistance	10GΩ or 500/CΩ whichever is smaller (C in Farads)
Aging	X7R/X6S/X5R : typically 1.0% and Y5V ≤ 7% per decade of time
Dielectric Strength	250% Rated Voltage

◆ Dimensions



TYPE	L	W	T (max)	B (min)	BW (min)
0402	1.00±0.05 [.039±.002]	0.50±0.05 [.020±.002]	0.55 [.022]	0.30 [.012]	0.15 [.006]
0603	1.60±0.10 [.063±.004]	0.80±0.10 [.031±.004]	0.95 [.037]	0.40 [.016]	0.15 [.006]
0805	2.00±0.20 [.079±.012]	1.25±0.20 [.049±.008]	1.45 [.057]	0.70 [.028]	0.20 [.008]
1206	3.20±0.30 [.126±.012]	1.60±0.20 [.126±.012]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20±0.30 [.126±.012]	2.50±0.20 [.098±.008]	2.70 [.105]	1.60 [.063]	0.30 [.012]
1812	4.60±0.3 [.181±.012]	3.20±0.3 [.126±.012]	3.00 [.118]	2.50 [.098]	0.30 [.012]
2220	5.7±0.40 [.220±.016]	5.00±0.40 [.197±.016]	3.00 [.118]	3.50 [.137]	0.30 [.012]

◆ How To Order

C	0805	B	106	K	010	T
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Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging
C: MLCC (Multilayer Ceramic Chip of Capacitor)	Ex. 0402 0603 0805 1206 1210 1812 2220	Ex.: X:X7R S:X6S B:X5R Y:Y5V	Ex.: 105:10×10 ⁵ 106:10×10 ⁶ 226:22×10 ⁶	Ex.: J : +/- 5% K : +/- 10% M : +/- 20% Z : +80/-20%	Ex.: 004: 4Vdc 007: 6.3Vdc 010: 10Vdc 016: 16Vdc 025: 25Vdc 035: 35Vdc 050: 50Vdc	T: T&R 7" R: T&R 13" B: Bulk



◆ Capacitance Range

X7R (X) Series																											
Size	0402		0603				0805						1206						1210					1812		2220	
Code	6.3V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	35V	50V	6.3V	10V	16V	25V	35V	50V	10V	16V	25V	35V	50V	25V	50V	50V	
105	O	B	B	B	B	B	D	D	D	D	D	D	D	D	D/E	D/E	D/E	D/E	D	D	D	D	E	F	F	F	
155																											
225		B	B				D	D	D	D	D	D	E	E	E	E	E	E	F	F	F	F	F	F	F	F	
335							D	D					E	E	E	E	E	E	F	F	F	F	F	F	F	F	
475							D	D	D	D			E	E	E	E	E	E	F	F	F	F	F	F	F	F	
106							D	D	D				E	E	E	E	E		F	F	F	F	F/G	F/G	F/G	G	
226													E	E					G	G	G						

X6S (S) Series																														
Size	0402				0603						0805						1206						1210							
Code	6.3V	10V	16V	25V	4V	6.3V	10V	16V	25V	50V	4V	6.3V	10V	16V	25V	35V	50V	4V	6.3V	10V	16V	25V	35V	50V	6.3V	10V	16V	25V	35V	50V
105	O	O	O	O		B	B	B	B	B				D	D	D	D							E	E					E
225	O	O	O			B	B	B	B					D	D	D	D						E	E	E	E			F	F
475	O					B	B	B	B	B			D	D	D	D	D					E	E	E	E	E			F	F
106					B	B	B	B				D	D	D	D	D					E	E	E	E	E		F	F	F	F
226					B	B					D	D	D	D						E	E	E	E			G	G	G	G	F/G
476											D								E	E		E				G	G	G		
107																			E	E						G				

X5R (B) Series																															
Size	0201		0402				0603						0805						1206					1210							
Code	6.3V	6.3V	6.3V	10V	16V	25V	35V	6.3V	10V	16V	25V	35V	50V	4V	6.3V	10V	16V	25V	35V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	
105	S	S	O	O	O	O	O	B	B	B	B	B	B				D	D	D	D			E	E	E	F	F	F	F	F	
225	S	S	O	O	O	O		B	B	B	B	B	B			D	D	D	D	D			E	E	E	F	F	F	F	F	
335																	D	D	D	D											
475			O	O				B	B	B	B	B				D	D	D	D	D	D			E	E	E	F	F	F	F	F
106			O	O				B	B	B	B					D	D	D	D	D	D			E	E	E	F	F	F	F	F/G
226								B	B							D	D	D	D	D			E	E	E	G	G	G	G		
476														D									E	E							
107														D									E			G	G				

Y5V (Y) Series																	
Size	0402		0603				0805					1206			1210		
Code	6.3V	10V	6.3	10V	16V	25V	6.3V	10V	16V	25V	50V	10V	16V	25V	10V	16V	25V
105	O	O		B	B	B			B	B	D						
225			B	B	B				D	D	D						
475			B	B			D	D	D								
106							D	D	D			D	D/E	E		F	F
226							D	D				D/E	D/E		F	F	

■ Other dimensions, capacitance values and voltages rating are available. Please contact HEC.

Symbol Code	S	O	A	B	C	D	E	F	G	H
Thickness (mm)	0.3±0.03	0.5±0.05	0.6±0.1	0.85±0.1	1.0±0.1	1.25±0.20	1.6±0.2	2.0±0.2	2.4±0.2	2.8±0.2

单击下面可查看定价，库存，交付和生命周期等信息

[>>Holy Stone\(禾伸堂\)](#)