

HCC Series

[High Capacitance MLC–X7R,X5R,Y5V]

The **Holy Stone** HCC Series are designed to provide the highest capacitance values in smallest sizes. They are suitable for low voltage filtering circuits in DC-DC Converters and power supplies.

HCC series are offered in three different materials of X7R, X6S,X5R and Y5V and as high as 50v in 0402 to 1210 sizes. They are ROHS compliant and withstand up to 260°C soldering temperature.

◆ Features & Application

- ❑ Surface mount suited for Wave and reflow soldering
- ❑ High reliability and no polarity
- ❑ Small size and high capacitance value
- ❑ Excellent in high frequency characteristic
- ❑ Replace SMT Tantalum capacitors
- ❑ for smoothing and decoupling circuit
- ❑ Suitable DC-DC converter, personal computer and peripheral, telecommunication and general electronic equipment.

◆ Summary of Specification

X7R Dielectric Characteristic

Operation Temperature :	-55~+125 °C
Temperature Coefficient :	± 15% under -55~+125 °C(EIA Class II)
Capacitance Range	1.0uF to 10uF
Dissipation Factor :	Please see HEC specification data sheet
Insulation Resistance :	10GΩ or 500/C Ω whichever is smaller
Aging :	≦ 2.5 % per decade hr , typical
Dielectric Strength :	250% Rated Voltage

X6S Dielectric Characteristic

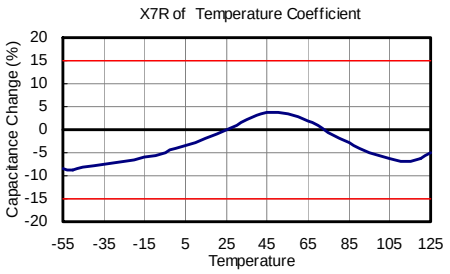
Operation Temperature :	-55~+105 °C
Temperature Coefficient :	± 22% under -55~+105 °C(EIA Class II)
Capacitance Range	1.0uF to 22uF
Dissipation Factor :	Please see HEC specification data sheet
Insulation Resistance :	10GΩ or 500/C Ω whichever is smaller
Aging :	≦ 2.5 % per decade hr , typical
Dielectric Strength :	250% Rated Voltage

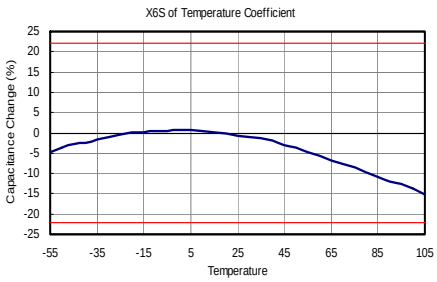
X5R Dielectric Characteristic

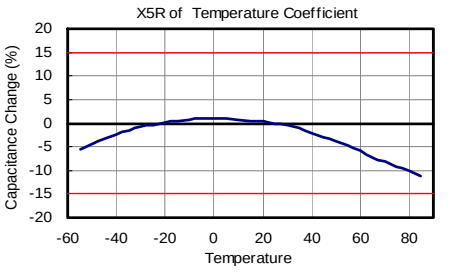
Operation Temperature :	-55~+85 °C
Temperature Coefficient :	± 15% under -55~+85 °C(EIA Class II)
Capacitance Range	1.0uF to 100uF
Dissipation Factor :	Please see HEC specification data sheet
Insulation Resistance :	10GΩ or 500/C Ω whichever is smaller
Aging :	≦ 2.5 % per decade hr , typical
Dielectric Strength :	250% Rated Voltage

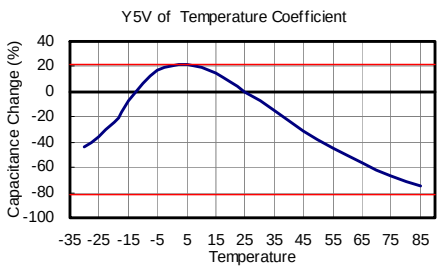
Y5V Dielectric Characteristic

Operation Temperature :	-30~+85 °C
Temperature Coefficient :	+22/ -82 %, -30~+85 °C(EIA Class II)
Capacitance Range	1.0uF to 47uF
Dissipation Factor :	Please see HEC specification data sheet.
Insulation Resistance :	10GΩ or 500/C Ω whichever is smaller
Aging :	≦ 7.0 % per decade hr , typical
Dielectric Strength :	250% Rated Voltage



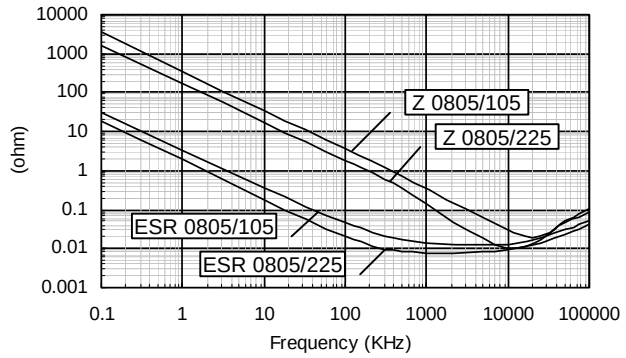




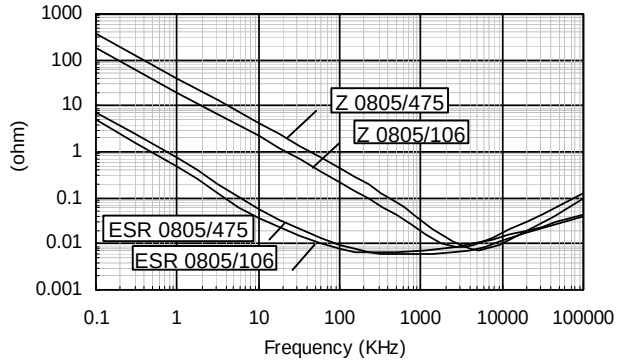


◆ Characteristic

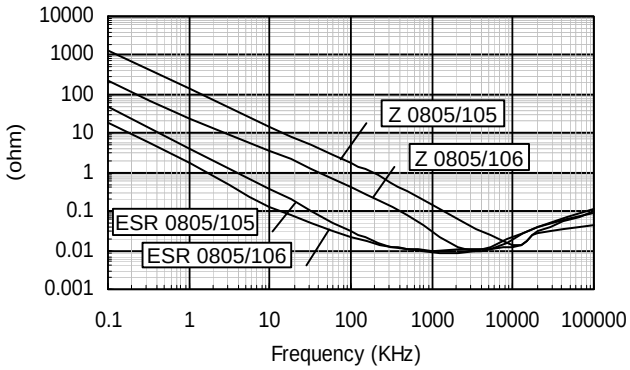
X7R(X) Series



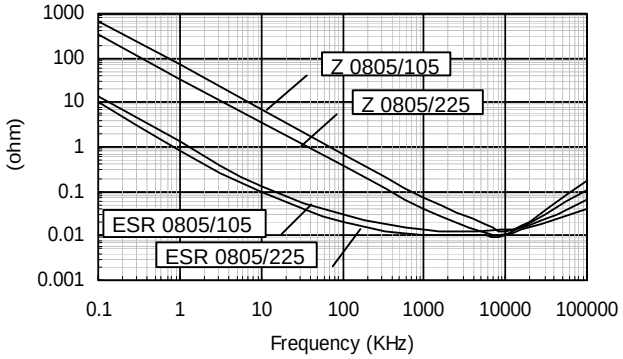
X5R(B) Series



Y5V(Y) Series



X6S(S) Series



◆ Capacitance Range

X7R (X) Series

Size		0603			0805				1206				1210				1812	2220
Code	VDC	6.3V	10V	16V	6.3V	10V	16V	25V	10V	16V	25V	35V	10V	16V	25V	35V	35V	35V
105	1uF	■	■	■		■	■	■		■	■	■		■	■	■	■	■
155	1.5uF																■	■
225	2.2uF	■	■	■	■	■	■		■	■	■			■	■	■	■	■
335	3.3uF				■	■			■	■								■
475	4.7uF				■	■			■	■				■	■	■		■
685	6.8uF																	
106	10uF								■				■	■	■	■		■

X6S (S) Series

Size		0603	0805		1206	1210			
Code	VDC	25V	10V	25V	25V	10V	16V	25V	50V
474	470nF								
105	1uF	■		■					■
225	2.2uF			■				■	
475	4.7uF			■	■		■	■	
106	10uF		■		■	■	■	■	
226	22uF					■	■	■	
476	47uF								

X5R (B) Series

Size		0402	0603				0805					1206					1210				
Code	VDC	6.3V	4V	6.3V	10V	16V	25V	4V	6.3V	10V	16V	25V	6.3V	10V	16V	25V	6.3V	10V	16V	25V	35V
105	1uF	■		■	■	■	■			■	■	■									■
155	1.5uF													■							
225	2.2uF			■	■				■	■	■	■		■	■	■				■	■
335	3.3uF								■	■	■	■		■	■	■					■
475	4.7uF			■					■	■	■	■	■	■	■	■			■	■	■
106	10uF		■	■					■	■			■	■	■	■		■	■	■	■
226	22uF							■	■				■	■	■	■	■	■	■	■	
476	47uF												■				■	■			
107	100uF																■				

Y5V (Y) Series

Size		0402	0603				0805					1206					1210						1812	
Code	VDC	6.3V	6.3	10V	16V	25V	6.3V	10V	16V	25V	50V	10V	16V	25V	35V	50V	6.3V	10V	16V	25V	35V	50V	35V	50V
105	1uF	■		■	■	■		■	■	■	■		■	■	■	■								
225	2.2uF		■	■	■			■	■	■			■	■	■									
475	4.7uF		■				■	■	■			■	■	■					■	■	■	■		■
106	10uF						■	■	■			■	■	■				■	■	■	■	■	■	■
226	22uF											■	■					■		■	■			
476	47uF																	■						
107	100uF																■							

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

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