

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.

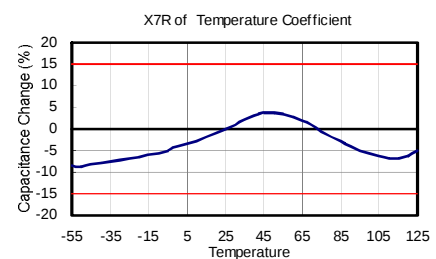
◆ Features & Application

- ❑ 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

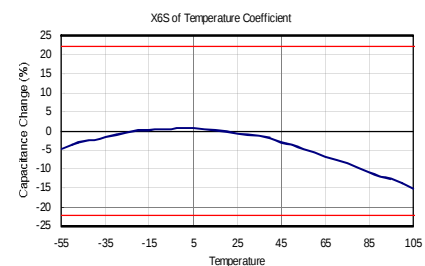
X7R Dielectric Characteristic

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



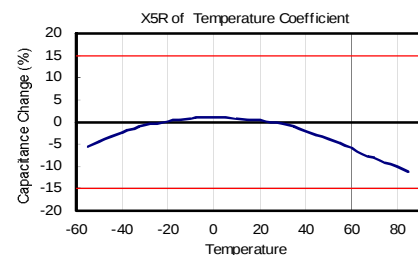
X6S Dielectric Characteristic

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



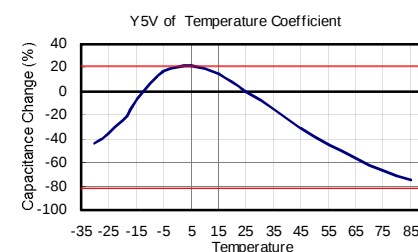
X5R Dielectric Characteristic

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

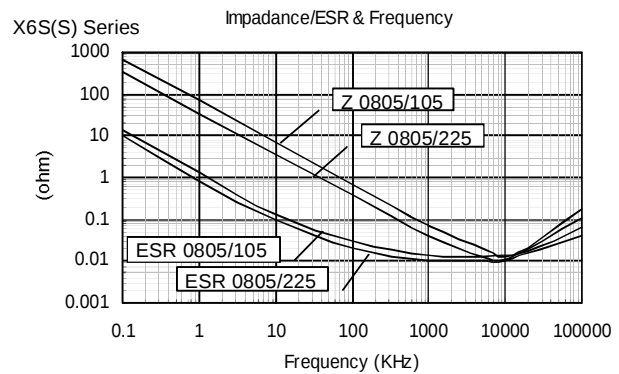
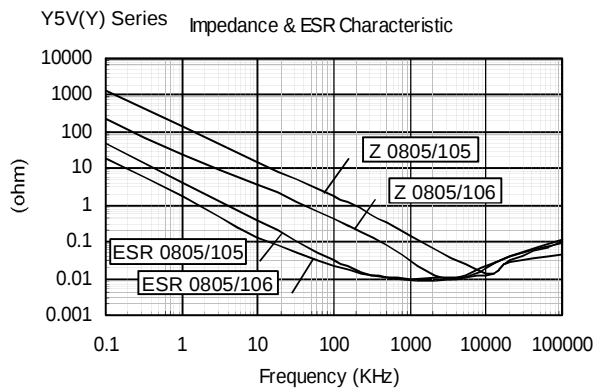
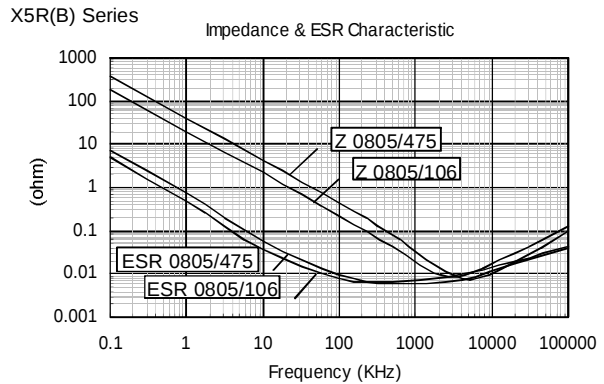
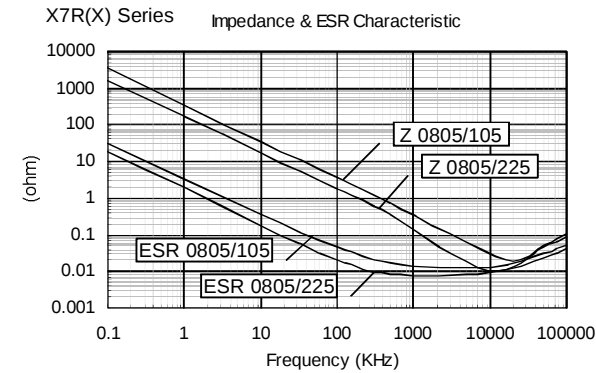


Y5V Dielectric Characteristic

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 : 10G Ω or 500/C Ω whichever is smaller
 Aging : $\leq 7.0\%$ per decade hr , typical
 Dielectric Strength : 250% Rated Voltage



◆ Characteristic



◆ Capacitance Range

X7R (X) Series																		X6S (S) Series												
Size		0603				0805				1206				1210				1812		2220		Size		0603	0805	1206	1210			
Code	VDC	6.3V	10V	16V	6.3V	10V	16V	25V	10V	16V	25V	35V	10V	16V	25V	35V	35V	35V	Code	VDC	25V	10V	25V	25V	10V	16V	25V	50V		
105	1uF																		474	470nF										
155	1.5uF																		105	1uF										
225	2.2uF																		225	2.2uF										
335	3.3uF																		475	4.7uF										
475	4.7uF																		106	10uF										
685	6.8uF																		226	22uF										
106	10uF																		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	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	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.



Holy Stone Enterprise Co., Ltd.

Milestone Global Technology
A Holystone Company
41120 Elm St. Suite 210
Murrieta, CA 92562
Tel: 951-696-4300
www.milestone-holystone.com