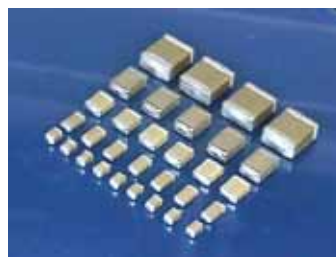


# HCY Series

## [ Y5U Characteristic Capacitor ]



### ◆ Features

- Small size & high capacitance
- Excellent high frequency characteristic due to low ESR
- Characteristic & improved temperature performance
- Excellent bias and high rated ripple current.
- Suitable for wave and reflow soldering

### ◆ Application

- Suitable DC-DC converter for smoothing circuit.
- Switching power supplies, DC Fan...etc.
- Noise suppressor and by pass or decoupling circuit.
- Other application requiring a very high capacitance circuit

### ◆ Summary of Specification

Operation Temperature	-30 to +85
Rated Voltage	25V to 100Vdc
Temperature Coefficient	Y5U : $\leq +22 / -56$ % , -30~+85 (EIA Class II )
Capacitance Range	10nF ~ 22uF
Dissipation Factor :	Y5U : D.F. 4.0% at 1KHz 20
Insulation Resistance	10G or 500/C whichever is smaller (C in Farad)
Dielectric Strength	250% Rated Voltage for 5 second @ 50mA max. current
Aging	Y5U: 4.0 % per decade hr, Typical

### ◆ How To Order

C
1210
E
106
M
025
T

Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging
C: MLCC (Multilayer Ceramic Chip of Capacitor)	Ex.: 0805: 2.0×1.25 mm 1206 : 3.2×1.6 mm 1210 : 3.2×2.5 mm	Ex.: E: Y5U	Ex.: 102:10×10 <sup>2</sup> 473:47×10 <sup>3</sup> 106:10×10 <sup>6</sup>	Ex.: M: +/- 20% Z:+80/-20%	Ex.: 025:25Vdc 050:50Vdc	T: Taping & Reel B: Bulk

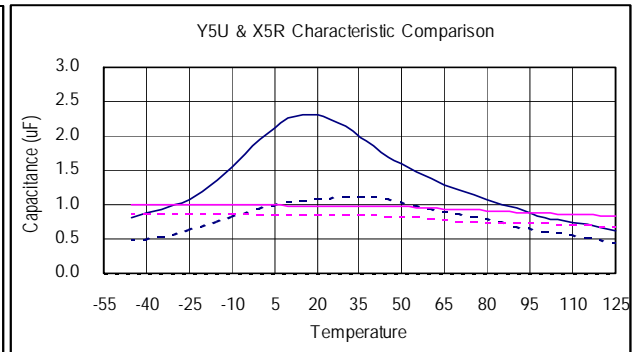
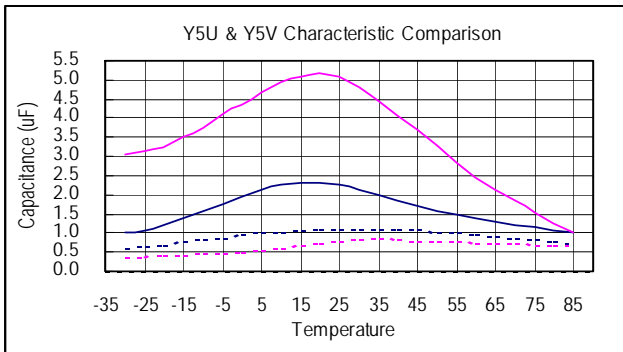
## ◆ Characteristic

E Series (Y5U) 2.2uF/25V  
 — Bias 0 V  
 - - - Bias 12V

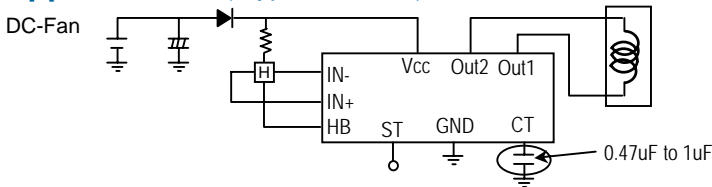
Barium Titante (Y5V) 4.7uF/16V  
 — Bias 0 V  
 - - - Bias 12V

E Series (Y5U) 2.2uF/25V  
 — Bias 0 V  
 - - - Bias 12V

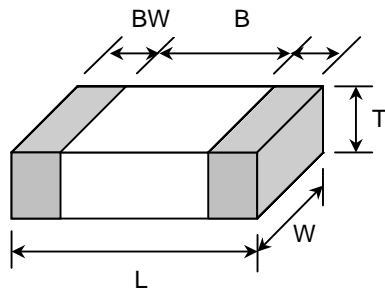
Barium Titante (X5R) 1.0uF/16V  
 — Bias 0 V  
 - - - Bias 12V



## ◆ Application (Typical Circuit)



## ◆ Dimension



Unit : mm [inches]

TYPE	L	W	T (max)	B (min)	BW (min)
0603	1.60+/-0.1 [.063+/-0.004]	0.80+/-0.1 [.031+/-0.004]	0.90 [.039]	0.40 [.016]	0.15 [.006]
0805	2.00+/-0.2 [.079+/-0.012]	1.25+/-0.2 [.049+/-0.008]	1.45 [.057]	0.70 [.028]	0.20 [.008]
1206	3.20+/-0.3 [.126+/-0.012]	1.60+/-0.2 [.126+/-0.012]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20+/-0.3 [.126+/-0.012]	2.50+/-0.2 [.098+/-0.008]	2.60 [.102]	1.60 [.063]	0.30 [.012]
1812	4.60+/-0.3 [.181+/-0.012]	3.20+/-0.3 [.126+/-0.012]	3.00 [.118]	2.50 [.098]	0.30 [.012]
2220	5.70+/-0.4 [.220+/-0.016]	5.00+/-0.4 [.197+/-0.016]	3.00 [.118]	3.50 [.137]	0.30 [.012]

## ◆ Capacitance Range

Temperature Characteristic	Size	Voltage	Capacitance Range																										
			222	332	472	682	103	153	223	333	473	683	104	154	224	334	474	684	105	155	225	335	475	685	106	226	336		
Y5U	0603	25V																											
		50V																											
	0805	25V																											
		50V																											
	1206	25V																											
		50V																											
	1210	25V																											
		50V																											
		100V																											
	1812	25V																											
		50V																											
		100V																											
2220	25V																												
	50V																												
	100V																												

▪ Other dimension, capacitance and Voltage Rating are available. Please contact HEC.