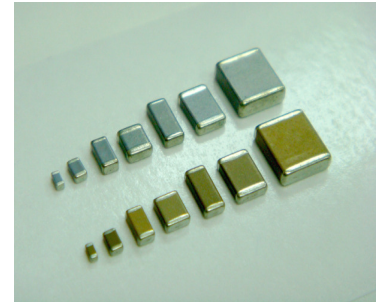




Holy Stone ... an innovation leader in ceramic capacitors!

Multilayer Ceramic Chip Capacitors (MLCC)



HVC Series – Middle Voltage [High Voltage Capacitor-100V to 1KV]

HVC SERIES

Multilayer Ceramic Chip Capacitances

Holy Stone high voltage products are designed and manufactured to meet the general requirements of international standards.

The product offering is well suited for commercial and industrial applications and includes C0G (NPO) and X7R characteristics in 0603 to 2220 sizes with working voltages up to 1KV.

◆ Features

- Special internal electrode design offers the highest voltage rating
- Surface mount suited for wave and reflow soldering
- High reliability
- RoHS compliant

◆ Application

- Suitable for LAN/WLAN interface, Back-Lighting Inverter, DC-DC Converters, Ballast, Modems & Power Supplies.

◆ Summary Specification

Operation Temperature	-55~+125 °C
Capacitance Range	2pF to 2.2uF
Rated Voltage	100Vdc to 1KVdc
Temperature Coefficient	NPO : $\leq \pm 30\text{ppm}/^\circ\text{C}$, -55~+125 °C (EIA Class I)
	X7R : $\leq \pm 15\%$, -55~+125 °C (EIA Class II)
Dissipation Factor :	NPO : $Q \geq 1000$; X7R : 2.5% max
Insulation Resistance	10GΩ or 500/C Ω whichever is smaller (C in farad)

◆ Summary Specification

Operation Temperature :

-55~+125 °C

Size :

0603 to 2225

Rated Voltage :

100V & 1KVdc

Temperature Coefficient :

NPO: $\leq \pm 30\text{ppm}/^\circ\text{C}$, -55~+125 °C (EIA Class I)

X7R: $\leq \pm 15\%$, -55~+125 °C (EIA Class II)

Aging :

NPO: 0%

X7R :2.5% per decade hr , Typical

Capacitance Range :

2pF ~ 2.2uF

Dissipation Factor :

NPO ≥ 1000

X7R $\leq 2.5\%$ max. at 1KHz 25°C

Insulation Resistance :

10G Ω or 500/C Ω whichever is smaller (C in Farad)

Dielectric Strength :

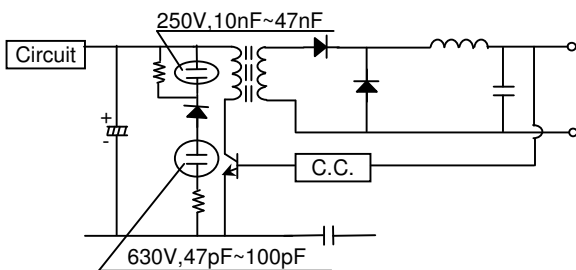
100V $\leq V < 500V$ 200% Rated Voltage

500V $\leq V < 1000V$ 150% Rated Voltage

1000V $\leq V$ 120% Rated Voltage

for 5 second @ 50mA max. current

◆ Application (Typical Circuit) DC-DC Converter



◆ Capacitance Scope

Size	0603						0805						1206										
Rated Voltage	100V		200V		100V		200V		250V		500V		100V		200V		250V		500V		630V	1KV	
TC	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	X7R	NPO	X7R
Min. Cap	2R0	151	2R0	100	471	2R0	471	2R0	471	2R0	471	181	2R0	102	2R0	102	180	181	392	101	221		
Max. Cap	471	183	151	102	104	681	473	681	473	681	223	105	472	104	472	104	182	563	473	102	103		

Size	1210						1808				1812				2220									
Rated Voltage	100V		200V		250V		500V		1KV		200V		250V		500V		1KV		250V		500V		1KV	
TC	X7R	NPO	X7R	NPO	X7R	NPO	X7R	X7R	X7R	NPO	X7R	X7R	X7R	NPO	X7R	X7R	X7R	X7R	X7R	X7R	NPO	X7R	NPO	X7R
Min. Cap	273	100	103	470	103	470	223	103	272	2R0	272	103	103	103	680	221	102	102	101	102				
Max. Cap	225	103	224	103	224	392	683	393	683	222	183	105	105	224	682	104	225	474	183	224				

Size	1825						2225					
Rated Voltage	250V		500V		1KV		250V		500V		1KV	
TC	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R
Min. Cap	101	103	101	103	101	103	101	103	101	103	101	103
Max. Cap	273	105	273	224	103	104	333	225	153	474	103	224

◆ How To Order

C	1210	X	103	K	102	T	O
Product Code	Chip Size	Dielectric	Capacitance(pF)	Tolerance	Rated Voltage	Packaging	Special Code
C: MLCC	0603:1.6x0.80mm	N:NPO	2R0;2.0pF	C: +/- 0.25pF	101:100Vdc	B:Bulk	O:Arc
(Multilayer	0805:2.0x1.25mm	X:X7R	100:10x10 ⁰	D: +/- 0.50pF	251:250Vdc	T:Tapping & Reel	Prevention
Ceramic	1206:3.2x1.60mm		471:47x10 ¹	J: +/- 5%	351:350Vdc		Coating
chip of	1210:3.2x2.50mm		182:18x10 ²	K: +/- 10%	501:500Vdc		X:Cushion
Capacitors)	1808:4.6x2.00mm		104:10x10 ⁴	M: +/- 20%	631:630Vdc		Termination
	1812:4.6x3.20mm				102:1KVdc		(Super Term)
	2208:5.7x2.00mm						
	2211:5.7x2.80mm						
	2220:5.7x5.00mm						



Location in Taiwan

Taiwan Taipei HQ

1FL, No 62, Sec 2, Huang Shan Rd., Nei Hu Dist., Taipei, R.O.C.

Tel: 886-2-26270383

Fax: 886-2-27987181

www.holystone.com.tw

Location in USA

Holy Stone International

26395 Jefferson Ave. Suite H Murrieta, CA 92562

Tel: 951-696-4300

Fax: 951-696-4301

www.holystonecaps.com

Info@holystonecaps.com

Location in China

Shanghai Sales Office

RM. 905-907, Walton Plaza, 801 Changle Road, Shanghai, China.

Tel: 86-21-54031122

Fax: 86-21-54046552

Suzhou Sales Office

Room 208, Building 1 Runjie Plaza, No.9 Dengwel Road, Suzhou New Area, China

Tel: 0512-82100058

Fax: 0512-68026968

Dongguan Plant

Baoshi Industrial Area, Jiaoyitang Tangxia, Dongguan, Guangdong, China.

Tel: 86-769-87928002

Fax: 86-769-87914761