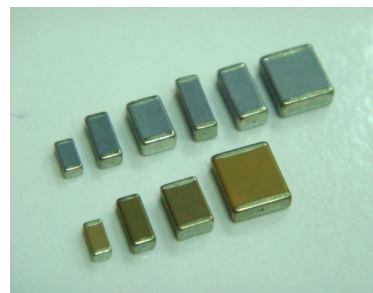




Holy Stone ... an innovation leader in ceramic capacitors!

Multilayer Ceramic Chip Capacitors (MLCC)

HVC Series – Ultra High Voltage [High Voltage Capacitor- 3KV~8KV]



HVC SERIES

Multilayer Ceramic Chip Capacitances

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

Capacitors with voltage ratings or 3KV to 8KV are ideally suited for LCD back light inverter circuits.

◆ Features

- Super term termination prevents cracking solution mechanical stress
- Special internal electrode design offers the highest voltage rating
- Surface mount suited for wave and reflow soldering
- High reliability
- RoHS compliant

◆ Application

- Suitable for back-lighting inverter ,DC-DC converters, modems and power supplies

◆ Summary Specification

| | |
|-------------------------|---|
| Operation Temperature | -55~+125 °C |
| Capacitance Range | 2pF to 1.0nF |
| Rated Voltage | 3KVdc to 8KVdc |
| 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 | 10G Ω or 500/C Ω whichever is smaller (C in farad) |

◆ Summary Specification

Operation Temperature :
-55~+125 °C

Size :
1206 ~ any size

Rated Voltage :
3KVdc to 8KVdc

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

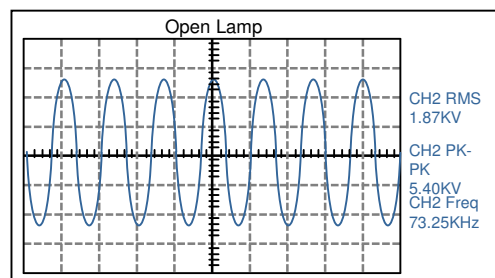
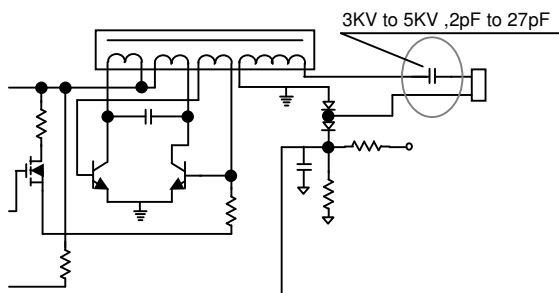
Capacitance Range :
2pF ~ 1.0nF

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 :
120% of rated voltage
for 5 second @ 50mA max. current

◆ Application (Typical Circuit) Backlight Inverter



◆ Capacitance Scope

| Temperature Characteristic | Size | Rated Voltage | Capacitance Range (pF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|------|--------------------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 2R0 | 3R3 | 3R9 | 5R0 | 8R0 | 100 | 120 | 150 | 180 | 220 | 270 | 330 | 390 | 470 | 560 | 680 | 820 | 101 | 121 | 151 | 181 | 221 | 271 | 331 | 391 | 471 | 561 | 681 | 821 | 102 | 122 | 152 |
| NPO | 1206 | 3KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1808 | 3KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1812 | 3KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2208 | 5KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2211 | 5KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2220 | 5KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature Characteristic | Size | Rated Voltage | Capacitance Range (pF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 151 | 181 | 221 | 271 | 331 | 391 | 471 | 561 | 681 | 821 | 102 | 122 | 152 | 182 | 222 | 272 | 332 | 392 | 472 | 562 | 682 | 822 | 103 | 123 | 153 | 183 | 223 | 273 | 333 | 393 | 473 | 563 |
| X7R | 1808 | 3KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1812 | 3KV | [Grid with blue shading] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

■ Other dimensions, capacitance values and voltages rating (more than 5KV) are available. Please contact HEC.

◆ How To Order

| C | 1808 | N | 150 | J | 302 | T | X |
|---|----------------|------------|------------------------|---------------|---------------|------------------|----------------------------|
| Product Code | Chip Size | Dielectric | Capacitance(pF) | Tolerance | Rated Voltage | Packaging | Special Code |
| C: MLCC | 1206:3.2x1.6mm | N:NPO | 2R0:2.0pF | C: +/- 0.25pF | 302:3KVdc | B:Bulk | O:Arc |
| (Multilayer Ceramic chip of Capacitors) | 1808:4.6x2.0mm | X:X7R | 100:10x10 ⁰ | D: +/- 0.50pF | 402:4KVdc | T:Tapping & Reel | P:Prevention Coating |
| | 1812:4.6x3.2mm | | 151:15x10 ¹ | J: +/- 5% | 502:5KVdc | | C:Cushion |
| | 2208:5.7x2.0mm | | 102:10x10 ² | K: +/- 10% | 602:6KVdc | | T:Termination (Super Term) |
| | 2211:5.7x2.8mm | | | M: +/- 20% | 802:8KVdc | | |
| | 2220:5.7x5.0mm | | | | | | |



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