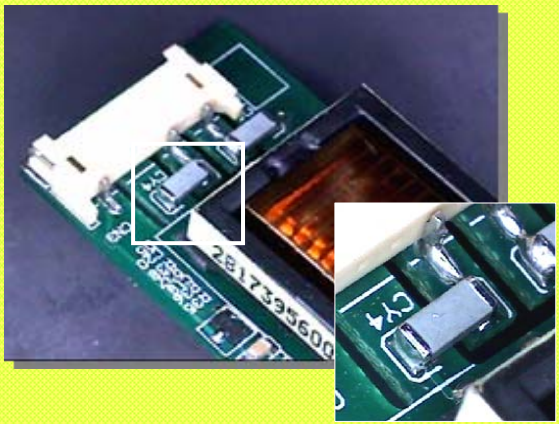
PCC Series
Ultra High Voltage (3KV to 6KV)

Hi-Voltage Capacitors for Inverter Applications

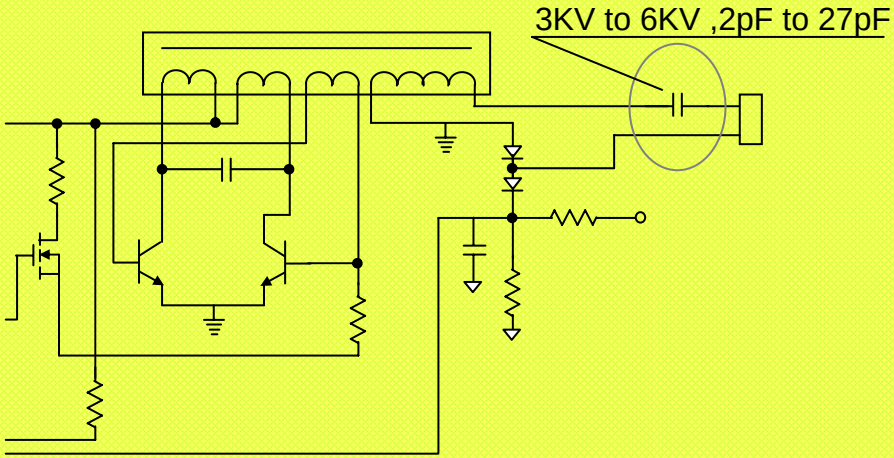
PCC Series

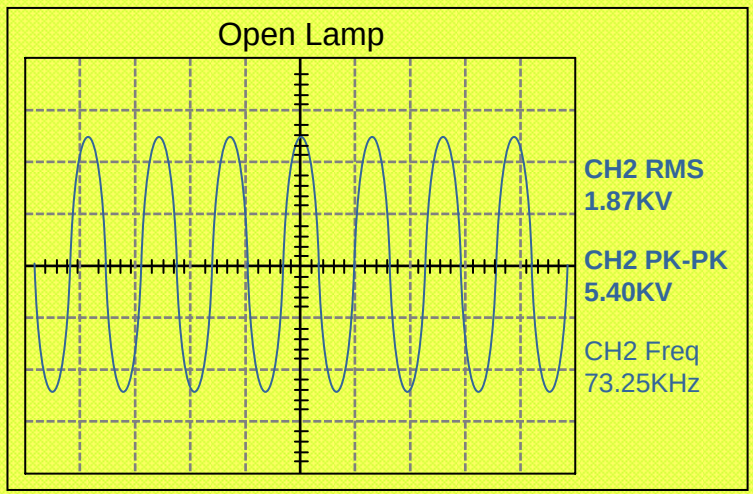


Voltage ratings from 3KV to 6KV for use in LCD backlight inverter circuits and applications

- ❑ Ultra High Voltage
- ❑ High reliability (Short Circuit Prevention)
- ❑ Surface mount suited for reflow soldering – replaces leaded disc caps
- ❑ Suitable for LAN/WAN interface,Back-Lighting Inverter , DC-DC Converters, Modems & Power Supply.

Application:





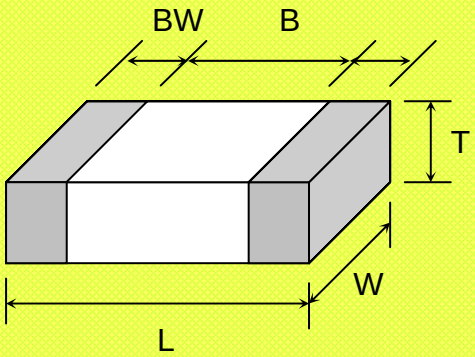
Hi-Voltage Capacitors for Inverter Applications

PCC Series

◆ Specification Summary:

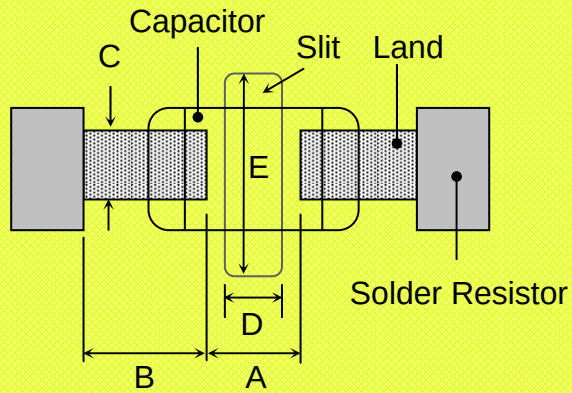
Operation Temperature	-55~+125 ℃
Rated Voltage	3KVdc to 6KVdc
Capacitance Deviation	5.0%max. (@ ΔT:60°C)
Capacitance Range	2pF to 27pF
Dielectric Strength	120% Rated Voltage

◆ Dimensions:



EIA Code	1808
L	4.60±0.30 [.181±.012]
W	2.00±0.20[.079±.008]
T (max)	2.20 [.087]
B (min)	2.50 [.098]
BW (min)	0.30 [.012]

◆ Pad Layout:



Code	1808
A	2.8~3.4 mm
B	1.8~2.0 mm
C	1.5~1.8 mm
D	1.0~2.8 mm
E	3.6~4.1 mm

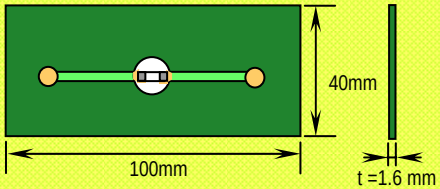
Hi-Voltage Capacitors for Inverter Applications

PCC Series

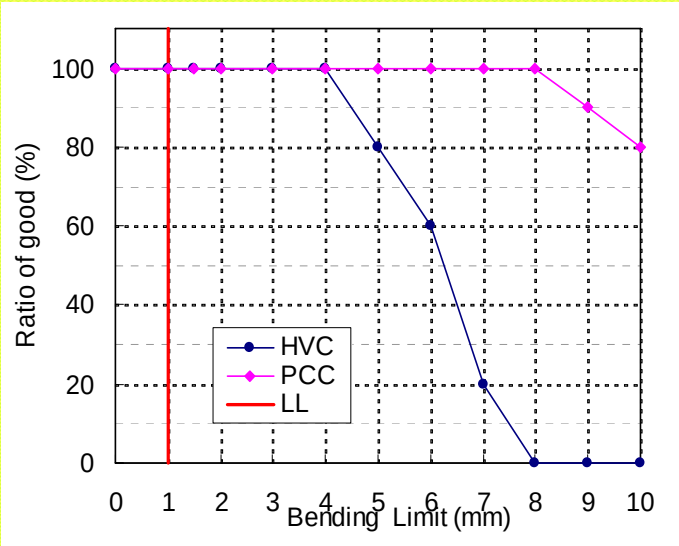
(1) Comparison to typical high voltage MLCC's:

(a) Substrate Flexure

Bending Test



1808/NPO/6KV v.s. PCC Series

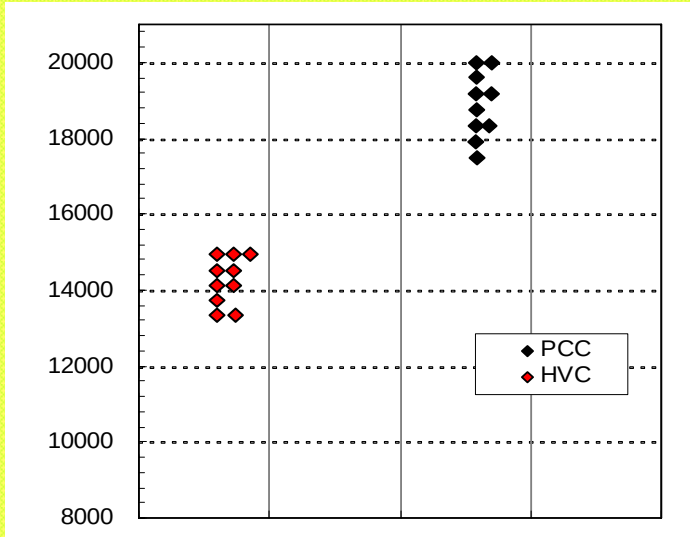


→ Improved capability

(b) Breakdown Voltage

Breakdown Voltage

1808/NPO/6KV v.s. PCC Series



→ Improved capability

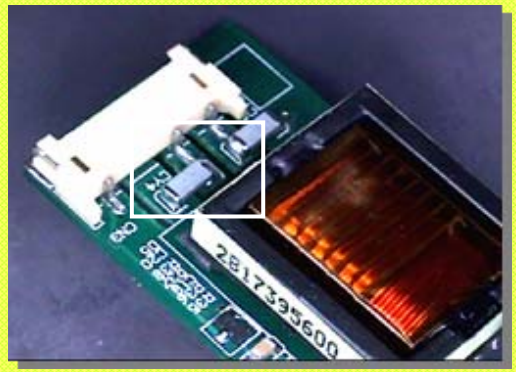
Hi-Voltage Capacitors for Inverter Applications

PCC Series

(2) Comparison with Disc Caps:

(a) Savings compared with through hole engineering costs:

Through Hole



SMD

(b) Lower price compared to typical high voltage MLCC's and similar to disc caps

→ **20% price reduction over standard high voltage products**

Hi-Voltage Capacitors for Inverter Applications

PCC Series

How To Select Product Series:

Item	HVC Series	PCC Series
Capacitor Rated Voltage (Vdc)	1808/ 6KV	1808/ 6KV
Breakdown Voltage	12,000Vdc Min.	16,000Vdc Min.
Open Lamp (Vrms)	2000~3200 V	2000~3200 V
Dimensions	1808	1808
Creepage Distance	3.5mm	3.5mm

We recommend selection of the actual capacitor application voltage based on about 1/3 of the breakdown voltage

Capacitance Ranges:

Temperature Characteristic	Size	Rated Voltage	Capacitance Range (pF)																														
			2R0	3R3	3R9	5R0	8R0	8R2	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	182
PCC	1808	3KV	■	■	■	■	■	■	■	■	■	■	■	■																					
		6KV	■	■	■	■	■	■	■	■	■	■	■	■																					