

## General Information

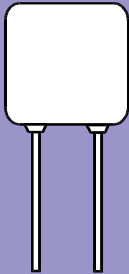
Calramic Technologies LLC offers a unique dielectric for pulse discharge applications.

With energy densities up to 1 joules/cc, and a wide variety of part sizes and mounting configuration, Calramic Technologies LLC can customize a design for your application.

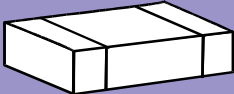
The dielectric is specially formulated for pulse applications and the life needed for these applications. The dielectric has low piezoelectric and hysteresis effects, and is capable of withstanding long term pulses under a variety of conditions.

Depending on the application, Calramic Tech LLC can perform production Group A screening in addition to SLAM and partial discharge testing.


### Available Configurations



**Leaded and coated for through-hole**



**Chip capacitor**



**Surface Mount**

**For custom configurations contact the factory.**

## Part Number & Ordering Information

PD	3540	CR09	104	K	102	P	M	S	C
<b>Product Line</b> Pulse Discharge		<b>Dielectric</b>		<b>Tolerance</b> J=±5% (NPO only) K=±10% M=±20% P=-0%/+100% Z=-20%/+80%		<b>Termination Type</b> P=Pd/Ag S=Silver		<b>SLAM testing</b>	
<b>Style</b>		<b>Capacitance Value in pF</b> First two digits are significant, last two are numbers of zeros, i.e. 104=100,000pf			<b>Voltage</b> 302=3,000V 103=10,000V etc.		<b>Screening</b> Add if Group A screening is required		<b>Partial Discharge Test</b> IAW MIL-PRF-49467

For custom configurations contact the factory.

SPECIFICATION	DIELECTRIC TYPE
	CR09
<b>Temperature Range</b>	-55°C to 125°C
<b>Temperature Coefficient</b>	± 27%
<b>Dissipation Factor @ 1kHz, 25°C</b>	.25% max
<b>Voltage Coefficient</b>	-10% max
<b>Voltage Range</b>	500VDC to 6kVDC
<b>Dielectric Withstanding Voltage Test</b>	1.5 xVrated ≤ 1kV 1.2 xVrated ≥ 1KV
<b>Insulation Resistance @ 25°C</b>	100,000MΩ or 1,000MΩ - μF whichever is less
<b>Insulation Resistance @ 125°C</b>	10,000MΩ or 100MΩ - μF whichever is less @ 125°C



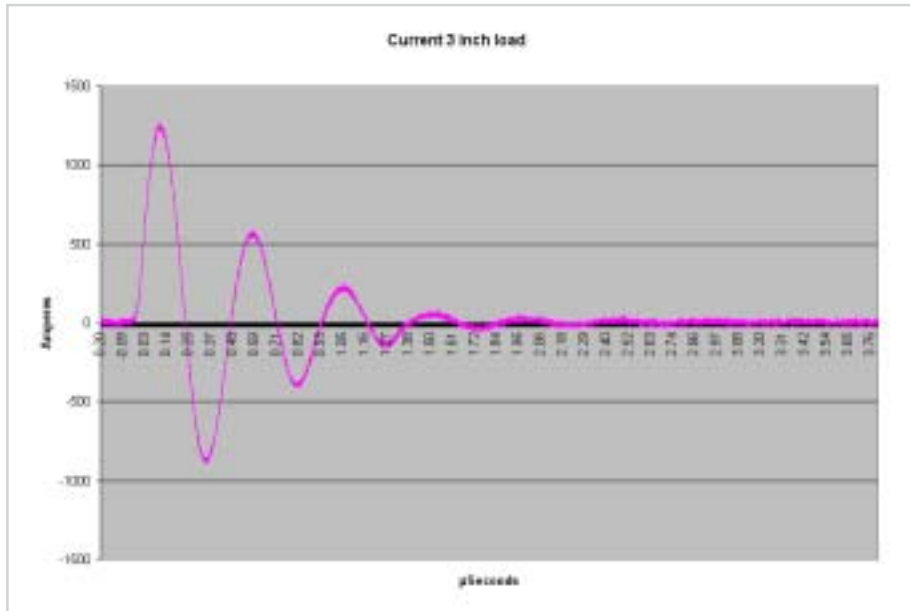
# High Voltage Pulse Discharge Ceramic Capacitors

## High Voltage Pulse Discharge Ceramic Capacitors

STYLE	1KV		3KV		5KV	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
2025	1800pf	.068 $\mu$ F	-	-	-	-
3530	4700pf	.18 $\mu$ F	1800pf	.018 $\mu$ F	-	-
3540	6800pf	.27 $\mu$ F	2500pf	.025 $\mu$ F	-	-
6065	.018 $\mu$ F	.82 $\mu$ F	8200pf	.082 $\mu$ F	3900pf	.047 $\mu$ F
8085	.033 $\mu$ F	1.2 $\mu$ F	.015 $\mu$ F	.15 $\mu$ F	8200pf	.1 $\mu$ F

For other C-V combinations, contact the factory.

Typical Waveform and Output Data - 3530, 0.1uf, 1KVDC rated



TEST CONDITIONS	
Input Voltage	1000VDC
Time Between Discharge and Charge	5.0 seconds
Pulse Peak Current	1100 Amperes
Pulse Width	170nSec
Rise Time	80nSec
Load Condition	Shorted

0204

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