



# DETONATOR & PULSE ENERGY

NOVACAP offers a line of High Temperature detonator and pulse energy capacitors designed for oil field exploration and perforation. The high energy capacitors are manufactured with a dielectric formulation designed for reliable operation under single or multiple pulse firing applications. Energy density exceeds that of conventional Class I materials and offers excellent short duration pulse delivery at temperatures to 200° C. Discharge pulse width which is typically less than 100 nanoseconds will vary with load conditions which are influenced by inductive and resistive load components.

All parts are 100% tested to NOVACAP High Reliability Pulse Screening tests and are evaluated at temperature extremes up to 200°C consistent with munitions and oil field exploration/seismic detonation conditions. Other sizes,

voltages and capacitance ratings are available in single, series, and series/parallel arrangement for custom applications. As an added safety feature, these pulse discharge capacitors can be supplied with integral bleed resistors at various resistance values. With exceptionally low ESR and low signal distortion, additional applications at high temperature include power supply filtering, energy storage and coupling/decoupling. When operated at temperatures less than 200°C, higher capacitance values are available. 500 Megohm safety bleed resistor are standard, but other values are available.

## DIMENSIONS

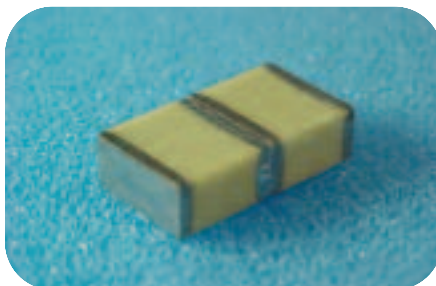
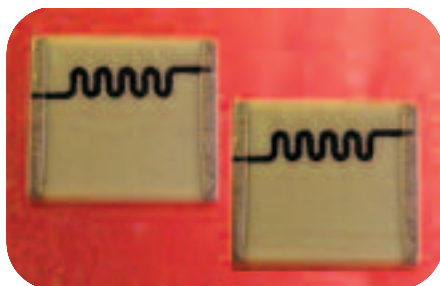
	SIZE	1825	2225	3040	3640	6560
DIMENSIONS INCHES (MM)	LENGTH L	.180 (4.57)	.220 (5.59)	.300 (7.62)	.360 (9.14)	.650 (16.5)
	WIDTH W	.250 (6.35)	.250 (6.35)	.400 (10.2)	.400 (10.2)	.600 (15.2)
	T MAX.	.150 (3.81)	.150 (3.81)	.250 (6.35)	.200 (5.08)	.300 (7.62)
	MB	.024 (.610)	.030 (.762)	.030 (.762)	.030 (.762)	.040 (1.02)
TOLERANCE +/- INCHES (MM)	LENGTH	.012 (.305)	.015 (.381)	.015 (.381)	.018 (.457)	.033 (.838)
	WIDTH	.015 (.381)	.015 (.381)	.015 (.381)	.020 (.508)	.030 (.762)
	MB	.014 (.356)	.015 (.381)	.015 (.381)	.015 (.381)	.020 (.508)

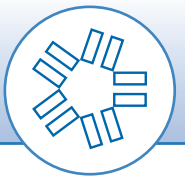
## CAPACITANCE & VOLTAGE SELECTION FOR CHIP SIZES\*

3 digit code: two significant digits, followed by number of zeroes eg: 473 - 47,000 pF,

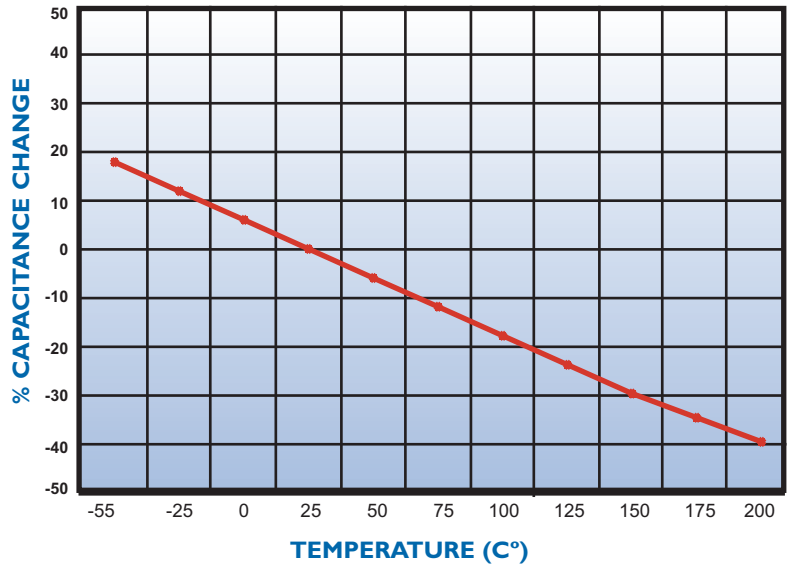
	SIZE	1825	2225	3040	3640	6560
MAX CAP @ VOLTAGE	1000V	473	683	174	204	594
	1500V	223	393	124	144	404

\*Additional case sizes and voltages are available. Please contact the factory directly to discuss your requirements.

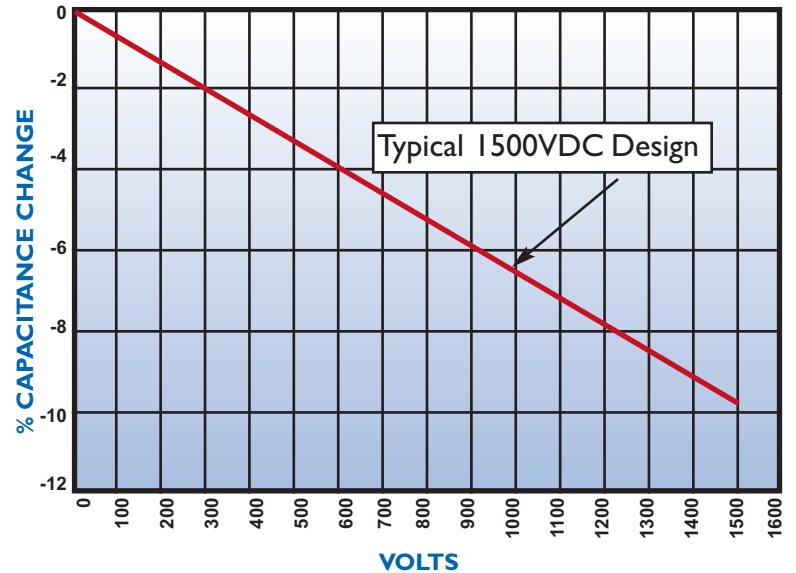




## TEMPERATURE COEFFICIENT

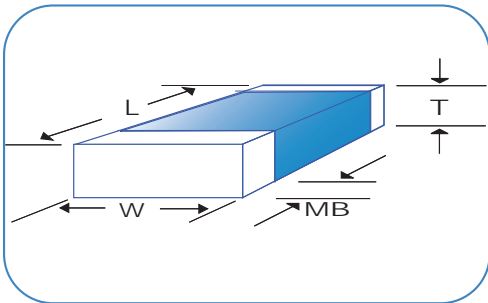


## VOLTAGE COEFFICIENT



## R2D DIELECTRIC CHARACTERISTICS

Operating Temperature Range	- 55°C to 200°C
Temperature Coefficient	- 2200 ppm/°C +/- 250 ppm/°C
Dissipation Factor	0.1% max. @ 25°C
Insulation Resistance, 25°C * whichever is less	100GΩ or 1000ΩF *
Insulation Resistance, 125°C * whichever is less	10GΩ or 100ΩF *
Dielectric Withstanding Voltage	1.2 x rated VDC
Aging Rate	0% per decade
Test Parameters	1KHz, 1.0 +/- 0.2 VRMS, 25°C



## HOW TO ORDER

RC	3640	R	I24	K	I02	P	X	T	M
<b>STYLE OPTION</b> RC = Bleed Resistor (optional)	<b>SIZE</b> See Chart	<b>DIELECTRIC</b> R = R2D	<b>CAPACITANCE</b> Value in Picofarads Two significant figures, followed by number of zeros: I24 = 120,000 pF	<b>TOLERANCE</b> J = +/- 5.0% K = +/- 10 % M = +/- 20 % Z = +80%-20% P = +100%-0%	<b>VOLTAGE-VDCW</b> Two significant figures, followed by number of zeros: I02 = 1000V	<b>TERMINATION</b> P = Palladium Silver	<b>THICKNESS OPTION</b> Size 1825 & 2225 require an X in the part number	<b>PACKING OPTION</b> T=Reeled	<b>MARKING OPTION</b> M = Marked (See Marking Specification)