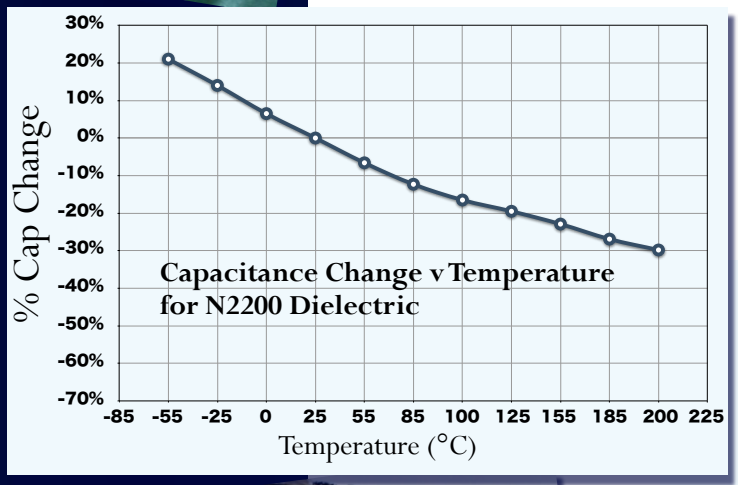
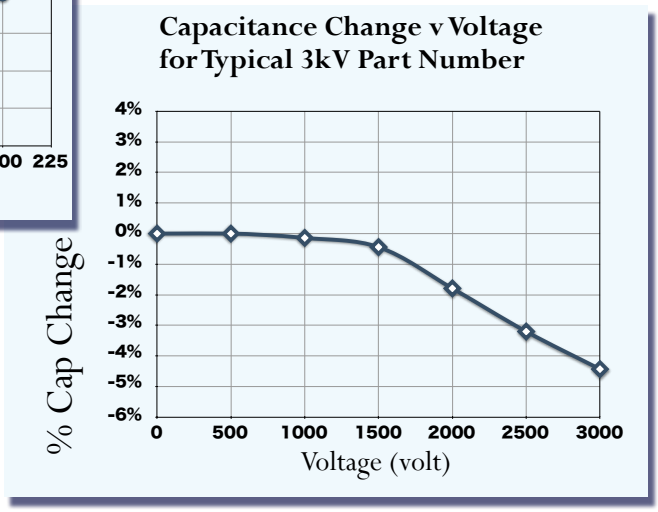
N2200 Fuze Capacitors

Wright Capacitors Inc.'s **N2200 Fuze Capacitors** are manufactured using WCI's proprietary negative temperature coefficient dielectric formulation. The non-piezo nature of this material makes it ideally suited for repetitive or single high current **pulse type applications**; such as, **detonation** in oil fields or munition type environments. WCI has been supplying this dielectric for high reliability and demanding applications for over 20 years. WCI's N2200 dielectric formulation also shows excellent voltage coefficient making this material more volumetrically efficient than X7R at high voltages.



Low ESR and DF (0.1% typical), over a range of frequencies in addition to the increase capacitance at low temperatures also make this dielectric suitable for other applications.



Dielectric Characteristics

Temperature Coefficient: 2200ppm/°C (-55°C to

dF: **0.15% Max**

IR: 25°C > 100GΩ
125°C > 10GΩ
200°C > 1GΩ

DWV: **500VDC to** = 150% Rated Voltage
> 1kV = 120% Rated Voltage

Test Parameters: **= 1kHz, 1.0 Vrms, 25°C**

PROUDLY MADE IN USA

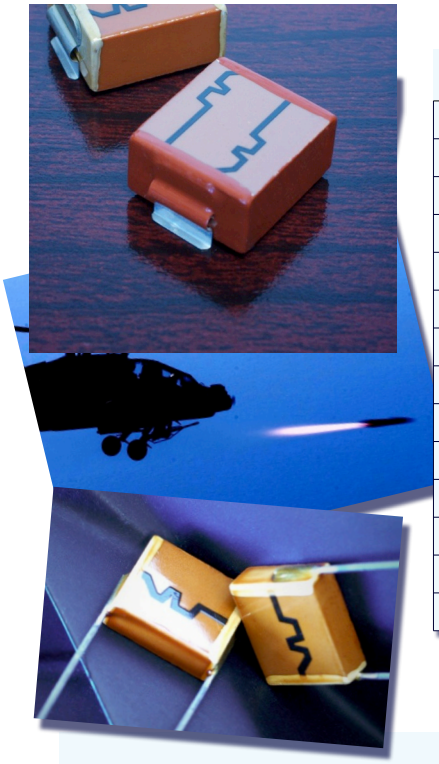
2610 OAK ST., SANTA ANA, CA 92707 • TEL: (714) 546-2490 • FAX: (714) 546-1709

EMAIL: WCI@WRIGHTCAP.COM • WWW.WRIGHTCAPACITORS.COM

As a safety feature an integrated **bleed resistor** can be included on the capacitor. This can either be a single resistive element or dual for redundancy purposes. Typical resistance values range from 100MΩ to 500MΩ at ±20%. Although other values and tolerances can be specified. Resistors are stable up to 200°C.

Fuze caps with an integrated bleed resistor will be coated with our clear, high temperature, high voltage and moisture resistant protective coating. All other fuze caps will be coated with our red urethane varnish.

Our fuze capacitors can be included in any of our standard lead configurations or custom **lead attach** / PWB mount.



Case Size, Voltage, Capacitance

Case Size	2838	3840	4565	6964	8840	13060
Length (inch nominal)	0.280	0.380	0.450	0.690	0.880	1.300
Width (inch nominal)	0.380	0.400	0.650	0.650	0.400	0.600
Thick (inch maximum)	0.275	0.275	0.300	0.300	0.300	0.300
Voltage / Capacitance(pF)						
500volt	184	224	474	824		
1,000volt	104	154	334	564		
2,000volt	473	563	124	274		
3,000volt	183	223	473	104		
4,000volt	823	103	333	683	223	104
5,000volt	392	562	103	223	123	473
7,000volt			562	103	562	153
10,000volt			272	682	332	822

*Other sizes available on request - contact factory

Ordering Information

SMN	3840	TH	R	124	K	D	102	-R300
SM- Surface Mount **SMN-** Surface Mount w/ Testing	Chip Size	**E** = E Lead **G** = Gull Lead **J** =J Lead **L** = L Lead **T** =Tab Lead **H** = High Temp Coating	Dielectric **N** = NPO **R** = N2200 **X** = X7R	Capacitance Value Code 102=1000pF First 2 digits are significant, the third denotes number of zeros	Tolerance F= ±1% G= ±2% J= ±5% K= ±10% M= ±20% Z= +80%/-20% V= +100%	Termination Type **A**= Ag **D**= Pd/Ag **C**=Leads w/ SnPb Coating	Voltage 202= 2000volt First 2 numbers are significant, the third denotes the number of zeros	**-A**, **-B**, **-C** Group A,B,C Testing **-MN** No Marking **-NC** No Coating **-R###** Bleed Resistor in MΩ **-X###**

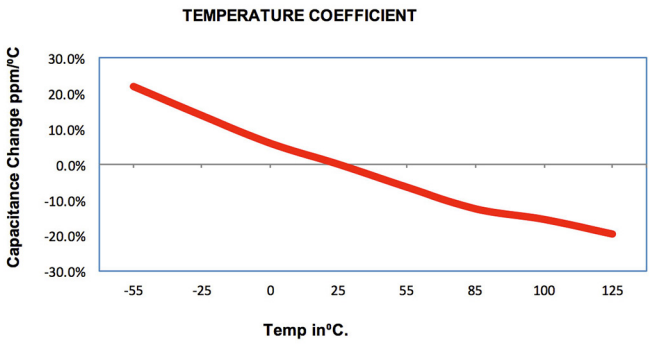
PROUDLY MADE IN USA

2610 OAK ST., SANTA ANA, CA 92707 • TEL: (714) 546-2490 • FAX: (714) 546-1709

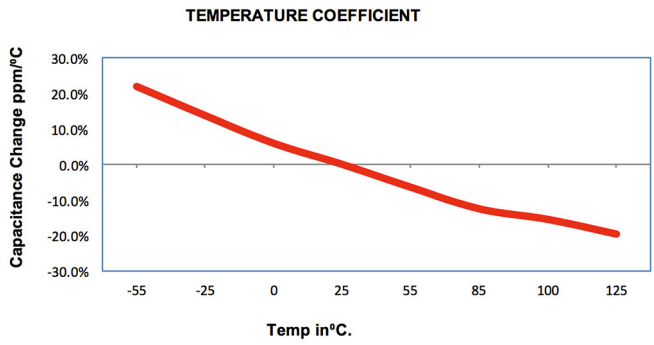
EMAIL: WCI@WRIGHTCAP.COM • WWW.WRIGHTCAPACITORS.COM

Temperature Coefficient

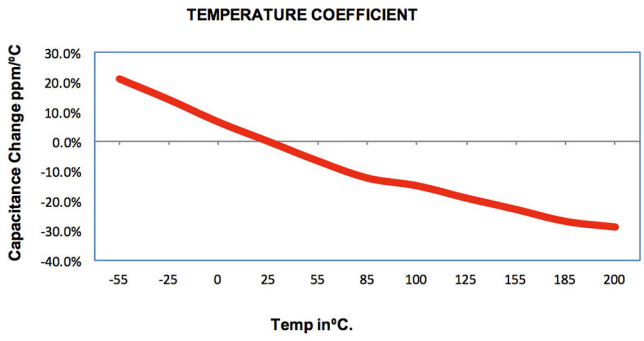
N2200 Pulse Energy (S)



N2200 (R) Pulse Energy/Fuze Capacitor



N2200 (T) HiTEMP 200°C



Dielectric Codes

Prefix	RoHS	Dielectric Code	Material	Temperature Coefficient
		N	COG/NPO	-55°/+125°C
		M	COG/NPO	Hi Temp -55°/+300°C
WC"R"	Y	P	NPO	Hi Temp -55°/+250°C
	Y	R	N2T	-55°/+125°C/ ±500pm
	Y	S	N2T	-55°/+125°C/ ±300pm
	Y	T	N2T	Hi Temp -55°/+200°C
		Z	X7R/BR	BR -55°/+125°C
WC"R"	Y	B	X7R/BR	BR -55°/+125°C
		X	BX/MIL	BX -55°/+125°C VC -25% max
		U	X8R	Hi Temp -55°/+160°C
		V	X9R	Hi Temp -55°/+200°C
	Y	W	X7R/BZ	BZ -55°/+125°C
	Y	Y	Y5V	Y5V -30°/+85°C

Prefixes

Prefix	Description
WC	Standard
WCN	Non standard Requirements High Temperature High Reliability
WCR	RoHS Compliant
HT	High Temperature (Potted Units)
HTN	High Temp w/ High Reliability Testing (Potted Units)
SM	Surface Mount
SMN	Surface Mount with High Reliability Testing

Capacitance Tolerance Codes

Code	Tolerance
F	± 1%
G	± 2%
J	± 5%
K	± 10%
M	± 20%
Z	+80%/-20%
V	± 100%

Suffixes

Suffix	Description
-A	Group A Testing
-B	Group B Testing
-C	Group C Testing
-NM	No Marking
-NC	No Coating
-R###	Bleed Resistor
-X###	Special Thickness

2610 S. OAK ST., SANTA ANA, CA 92707 • TEL: (714) 546-2490 • FAX: (714) 546-1709
EMAIL: WCI@WRIGHTCAP.COM • WWW.WRIGHTCAPACITORS.COM