

INDUSTRIAL GRADE HIGH VOLTAGE CERAMIC CAPACITORS



FEATURES

- **Best-in-Class AC Voltage Breakdown Characteristics**
- **Predictable and consistent performance results**
- **Minimized risk of infant mortality or latent in-field failure**
- **Superior Lead-free solder reflow performance: MSL=1.0**
- Green / ROHS Compliant
- Polyterm® Terminations available
- Safety Certified AC versions available

APPLICATIONS

- Superior Film Cap Replacement
- Industrial Controls
- Florescent and HID Lighting
- UPS Systems
- Networking
- Fans

NOT ALL HIGH VOLTAGE CAPACITORS ARE CREATED EQUAL

Johanson Dielectrics has performed extensive AC Voltage Characterization of our High Voltage Surface Mount Capacitor product line. The results document a superior high voltage product offering of Industrial Grade level. Complete test details are available.

AC VOLTAGE BREAKDOWN TEST DETAILS

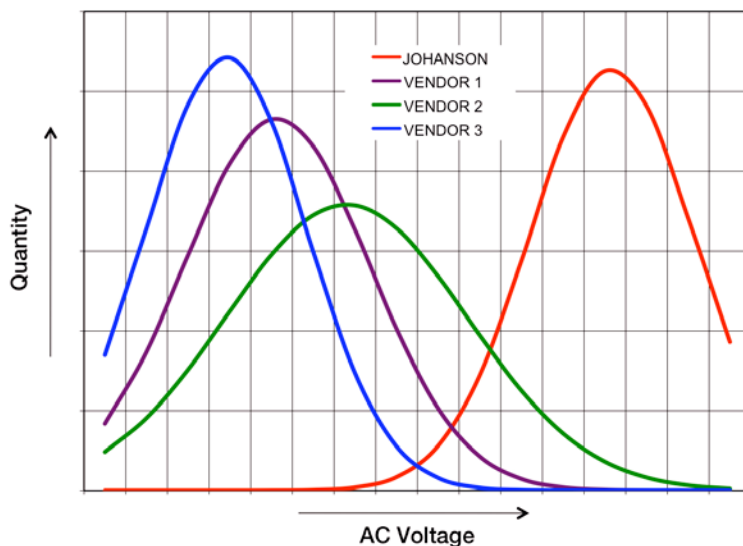
Failures below 1650 Vac guard band (Exceeds IEC384-14);

JOHANSON: 0 Failures
VENDORS 1-3: 9 - 9091 PPM

JOHANSON product exhibits 20% higher breakdown voltage level

JOHANSON product exhibits improved level of statistical variability

AC VOLTAGE BREAKDOWN COMPARISON



INDUSTRIAL GRADE HIGH VOLTAGE CERAMIC CAPACITORS

ELECTRICAL CHARACTERISTICS

COMPONENT TYPE	DC Rated High Voltage	AC Rated High Voltage (Safety Certified)
RATED VOLTAGE	500 - 6,000 VDC	250 VAC (X2/Y3, Y3, X1/Y2, Y2)
AVAILABLE CAPACITANCE VALUES:	10 pF - 0.47 μ F	100 pF - 4700 pF
TEMPERATURE COEFFICIENT:	$\pm 15\%$ -55 to +125°C	
DISSIPATION FACTOR :	DF $\leq 2.5\%$	
AGING:	$\leq 2.5\%$ per decade hour	
INSULATION RESISTANCE:	100 Ω F or 10G Ω @ 25°C, 125°C IR = 10% of 25°C rating	
DIELECTRIC STRENGTH:	1.5 $\times$ WVDC for ratings < 1000 Vdc @ +25°C & 50 mA max. 1.2 X WVDC, 25°C, 50mA max.	
TEST PARAMETERS:	1KHz ± 50 Hz @ C >100; 1.0 $\pm$ 0.2VRMS	

MAXIMUM CAPACITANCE AVAILABILITY

CASE SIZE	500 DC	630 DC	1000 DC	2000 DC	3000 DC	4000 DC	5000 DC	250 VAC
R15 / 0805	0.010 μ F	3900 pF	2700 pF	-	-	-	-	-
R18 / 1206	0.027 μ F	0.010 μ F	5600 pF	1000 pF	220 pF	-	-	-
S41 / 1210	0.047 μ F	0.027 μ F	0.010 μ F	2200 pF	560 pF	-	-	-
R29 / 1808	0.056 μ F	0.039 μ F	0.018 μ F	6800 pF	3300 pF	270 pF	120 pF	1500 pF
R30 / 2211	-	-	-	-	-	-	-	2700 pF
S43 / 1812	0.150 μ F	0.100 μ F	0.022 μ F	6800 pF	4700 pF	1500 pF	680 pF	-
S47 / 2220	0.330 μ F	0.270 μ F	0.056 μ F	0.027 μ F	0.010 μ F	2200 pF	1500 pF	4700 pF
S48 / 2225	0.470 μ F	0.330 μ F	0.120 μ F	0.039 μ F	0.015 μ F	5600 pF	1500 pF	-
S49 / 1825	0.330 μ F	0.220 μ F	0.039 μ F	0.018 μ F	8200 pF	2000 pF	820 pF	-

Available in RETMA E12 capacitance values. Consult factory for non-retma values and sizes or voltages not shown.
For additional information please refer to the High Voltage Ceramic Capacitor and Safety Certified Capacitor data sheets.

HOW TO ORDER

