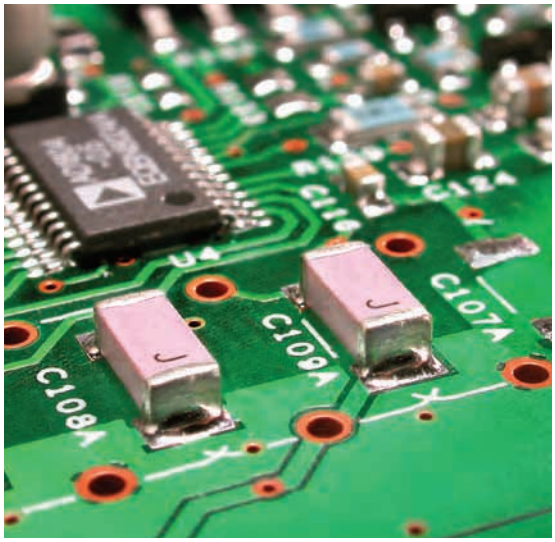
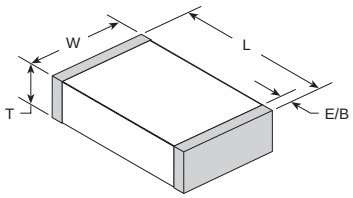
AC Safety Capacitors



Johanson Dielectrics Type SC ceramic chip capacitors are designed for AC voltage surge and lightning protection in line-to-ground interface applications in computer networks, modem, facsimile and other equipment.
Johanson's safety capacitor offering includes four different case sizes and NPO and X7R dielectric materials.
These devices are surface mount ready with barrier terminations and tape and reel packaging.
Information on capacitor safety ratings and certification details may be found below.



Polyterm® soft termination option available for demanding environments & processes.

SAFETY RATING	VOLTAGE RATING	WITHSTANDING VOLTAGE	IMPULSE VOLTAGE	CASE SIZE	JOHANSON ORDERING P/N
X2/Y3	250 VAC	1,500 VAC	2,500 V	1808	302R29_____V3E-****-SC
STANDARDS: EN 60384-14:2005, EN 60950 2001 • UL 60950-01 **CERTIFICATIONS:** TUV Rheinland T72110251 • UL File E212609 • Semko 0026092-1 & 0003222-1					
Y3	250 VAC	1,500 VAC	2,500 V	1812	302S43_____V3E-****-SC
STANDARDS: EN 60384-14:2005, EN 60950:2001 **CERTIFICATIONS:** TUV Rheinland T72110251					
X1/Y2	250 VAC	1,500 VAC	5,000 V	1808	502R29_____V3E-****-SC
STANDARDS: EN 60384-14:2005 • UL 60950-01 **CERTIFICATIONS:** TUV Rheinland T72110897 / UL File E212609-A1-UL-1					
Y2	250 VAC	1,500 VAC	5,000 V	2211	502R30_____V3E-****-SC
STANDARDS: EN 60384-14:2005 • UL 60950-01 **CERTIFICATIONS:** TUV Rheinland T72110897 • UL File: E212609-A1-UL-1					
X1/Y2	250 VAC	1,500 VAC	5,000 V	2220	502S47_____V3E-****-SC
STANDARDS: EN 60384-14:2005 • UL 60950-01 **CERTIFICATIONS:** TUV Rheinland T72110897 • UL File: E212609-A1-UL-1					
Japan	250 VAC	1,500 VAC	N/A	2220	AC2_____V4E-****-JS
STANDARDS: JIS-C-5102 • JIS-C-5150 **CERTIFICATIONS:** N/A					

X Capacitors are defined as suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.
Y Capacitors are defined as suitable for use in situations where failure of the capacitor could lead to danger of electric shock.

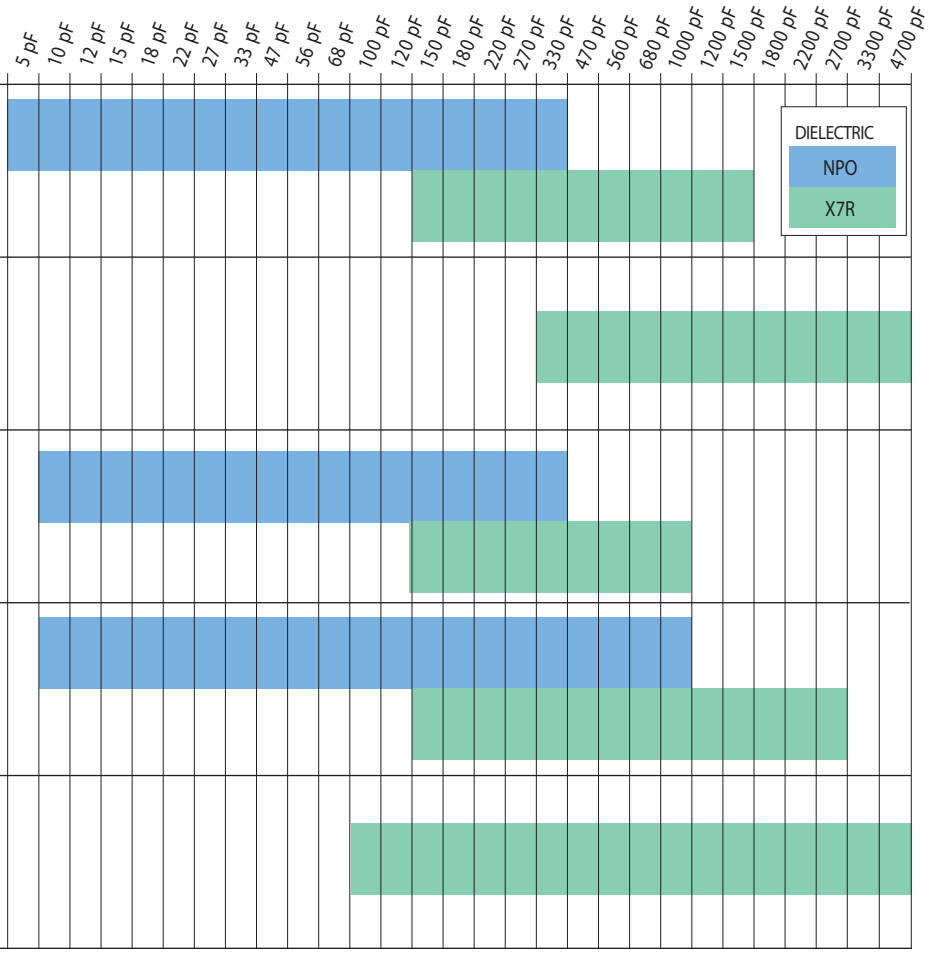
How to Order AC Safety Capacitors

P/N written: 302R29W102MV3E-****-SC

502	R29	W	102	M	V	3	E	-****-SC
VOLTAGE	**SIZE**	**DIELECTRIC**	**CAPACITANCE**	**TOLERANCE**	**TERMINATION**	**MARKING**	**PACKING**	**TYPE**
302 = 250VAC [2500V Impulse] 502 = 250VAC [5000V Impulse] AC2 =250VAC [N/A]	R29=1808 R30=2211 S43=1812 S47=2220 AC2=2220	N = NPO W = X7R	1st two digits are significant; third digit denotes number of zeros, R = decimal. 102 = 1000 pF 104 = 0.10 µF 5R0 = 5.0pF	J = ± 5% K = ± 10% M = ± 20%	V = NI Barrier with 100% Sn Plating (Matte) F = Polyterm flexible termination	3 = Special 4 = Unmarked	E = Embossed 7" No code = bulk Tape specs. per EIA RS481	SC = Safety Certified JS = Japan Safety

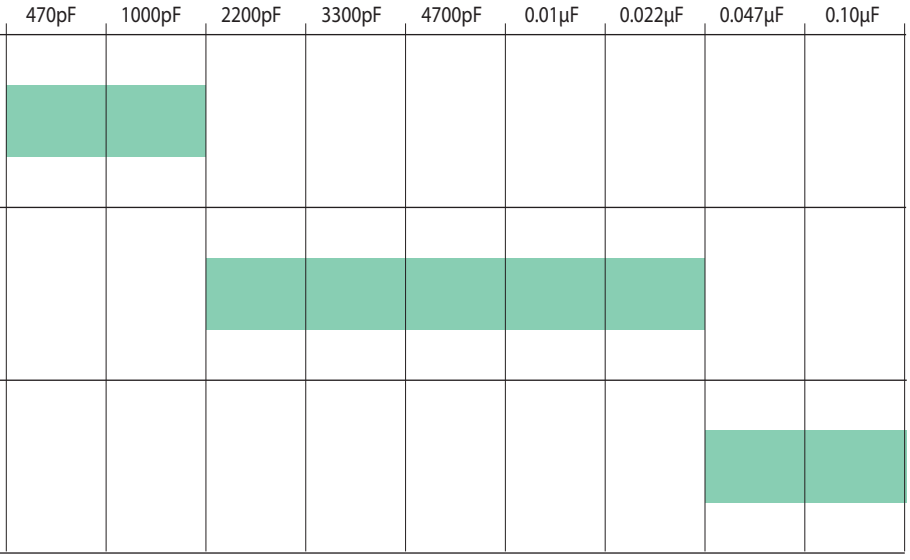
AC SAFETY CAPACITORS

SAFETY CERTIFIED



		INCHES	(mm)
R29 / 1808	L	.185 ±.015	(4.80 ±.25)
	W	.080 ±.010	(2.03 ±.25)
	T	.085 Max.	(2.16)
X2/Y3	E/B	.020 ±.010	(0.51±.25)
S43 / 1812	L	.175 ±.010	(4.45 ±.25)
	W	.125 ±.010	(3.17 ±.25)
	T	.115 Max.	(2.92)
Y3	E/B	.025 ±.015	(0.64±.38)
R29 / 1808	L	.185 ±.015	(4.80 ±.25)
	W	.080 ±.010	(2.03 ±.25)
	T	.085 Max.	(2.16)
X1/Y2	E/B	.012 ±.005	(0.30±.13)
R30 / 2211	L	.225 ±.016	(5.72 ±.40)
	W	.110 ±.010	(2.80 ±.25)
	T	.115 Max.	(2.92)
Y2	E/B	.020 ±.010	(0.51±.25)
S47 / 2220	L	.225 ±.015	(5.72 ±.38
	W	.200 ±.015	(5.08 ±.38)
	T	.150 Max.	(3.81)
X1/Y2	E/B	.025 ±.015	(0.64±.38)

JAPAN STANDARD



		INCHES	(mm)
J29 / 1808	L	.189 ±.010	(4.80 ±.25)
	W	.080 ±.010	(2.03 ±.25)
	T	.085 Max.	(2.16)
Japan Safety	E/B	.020 ±.010	(0.51±.25)
J43 / 1812	L	.175 ±.010	(4.45 ±.25)
	W	.125 ±.010	(3.17 ±.25)
	T	.115 Max.	(2.92)
Japan Safety	E/B	.025 ±.015	(0.64±.38)
J47 / 2220	L	.225 ±.015	(5.72 ±.38
	W	.200 ±.015	(5.08 ±.38)
	T	.150 Max.	(3.81)
Japan Safety	E/B	.025 ±.015	(0.64±.38)