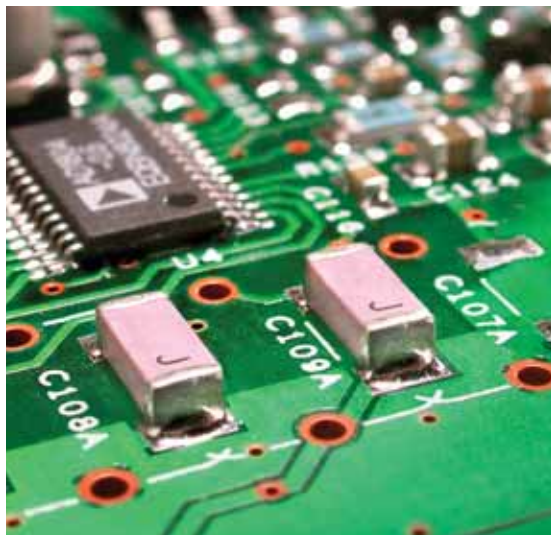


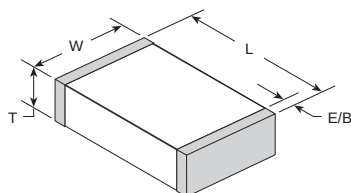


Johanson Dielectrics Type SC ceramic chip capacitors are designed for AC voltage surge and lightning protection in line-to-ground interface applications in computer networks, modem, facsimile and other equipment.

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.

Additional information on capacitor safety ratings may be found below. Specific certification details may be found under each product listing on the facing page.



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 T72090022 & T72072987 • 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 T72072987					
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 T72090023 & T72090024 / 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 T72090024 • 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 R72060014 • UL File: E212609-A1-UL-1					
Japan	250 VAC	1,500 VAC	3,000 V	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 SAFETY CERTIFIED P/N written: 302R29N101KV3E-****-SC

502	R29	N	101	K	V	3	E - **** - SC
RATED VOLTAGE [IMPULSE VOLT.] 302 = 250VAC [3000V IMP.] 502 = 250VAC [5000V IMP.] AC2 = 250VAC [N/A]	CASE SIZE See Chart DIELECTRIC N = NPO/COG W = X7R	CAPACITANCE 1st two digits are significant; third digit denotes number of zeros; 101 = 100 pF	TOLERANCE NPO: J = ± 5% K = ± 10% X7R: K = ± 10% M = ± 20%	TERMINATION V = Ni barrier w/ 100% Sn Plating F = Polyterm flexible termination	MARKING 3 = Special (J) 4 = Unmarked	TAPE MODIFIER Code Tape Reel E Embossed 7" Tape specifications conform to EIA RS481	TYPE SC = Safety Certified JS = Japan Safety

[illegible][illegible]