

GENERAL INFORMATION

AVX SR Series

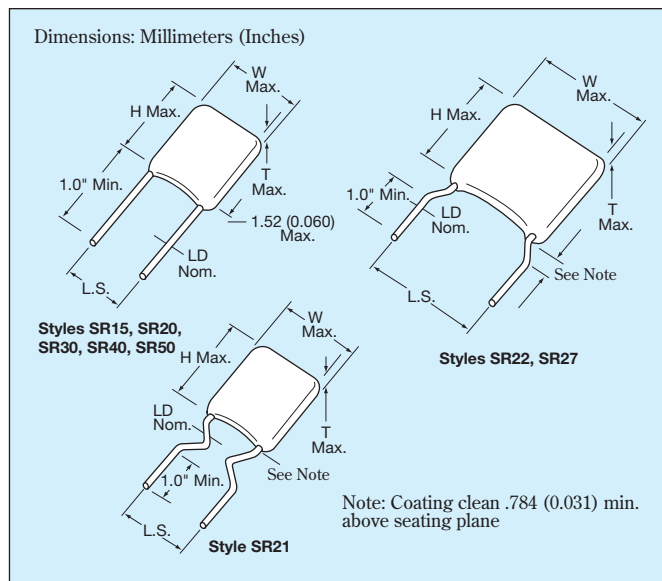
Conformally Coated Radial Ledged MLC

Temperature Coefficients: COG (NP0), X7R, Z5U

200, 100, 50 Volts (300V, 400V & 500V also available)

Case Material: Epoxy

Lead Material: RoHS Compliant, 100% Tin



HOW TO ORDER

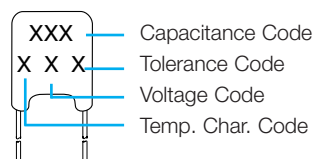
SR21	5	E	104	M	A	R	TR1
AVX Style SR15 SR20 SR21 SR22 SR27 SR30 SR40 SR50	Voltage 5 = 50V 1 = 100V 2 = 200V 9 = 300V 8 = 400V 7 = 500V	Temperature Coefficient A = COG (NP0) C = X7R E = Z5U	Capacitance First two digits are the significant figures of capacitance. Third digit indicates the additional number of zeros. For example, order 100,000 pF as 104. (For values below 10pF use "R" in place of decimal point, e.g., 1R4 = 1.4pF)	Capacitance Tolerance COG (NP0): C = $\pm 0.25\mu\text{F}$ D = $\pm 0.5\mu\text{F}$ F = $\pm 1\%$ ($>50\mu\text{F}$ only) G = $\pm 2\%$ ($>25\mu\text{F}$ only) J = $\pm 5\%$ K = $\pm 10\%$ X7R: J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$ Z5U: M = $\pm 20\%$ Z = $+80\%$ -20%	Failure Rate A = Not Applicable	Leads R = RoHS Long Lead 1.0" minimum	Packaging Blank = Bulk Packaging T = Trimmed Leads .230" $\pm$.030" Bulk packaging TR1 = Tape and Reel Packaging AP1 = Ammopack Packaging See packaging specification page 33-34.

Drawings are for illustrative purposes only.
Actual lead form shape could vary within stated tolerances based on body size.

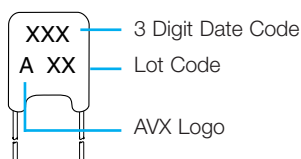


MARKING

FRONT



BACK



PACKAGING REQUIREMENTS

	Quantity per Bag
SR15, 20, 21, 22, 27, 30	1000 Pieces
SR40, 50	500 Pieces

Note: SR15, SR20, SR21, SR30, and SR40 available on tape and reel per EIA specifications RS-468. See Pages 33 and 34.

Radial Leads/SkyCap®/SR Series



C0G (NP0) Dielectric

SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	SR15	SR20	SR21	SR22	SR27	SR30	SR40	SR50
AVX "Insertable"	SR07	SR29	SR59	N/A	N/A	SR65	SR75	N/A
Width (W)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Height (H)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Thickness (T)	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	3.81 (.150)	3.81 (.150)	5.08 (.200)
Lead Spacing (L.S.)	2.54 (.100)	2.54 (.100)	5.08 (.200)	6.35 (.250)	7.62 (.300)	5.08 (.200)	5.08 (.200)	10.16 (.400)
Lead Diameter (L.D.)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)
Cap. in.* pF	Industry Preferred Values in Blue	WVDC 200 100 50	WVDC 200 100 50	WVDC 200 100 50	WVDC 200 100 50	WVDC 200 100 50	WVDC 100 50	WVDC 100 50
1.0-9.9 10 15	SR151A1R0DAR SR151A100KAR SR.....A150KAR							
22 33 39	SR.....A220KAR SR.....A330KAR SR.....A390KAR							
47 68 100	SR.....A470KAR SR.....A680KAR SR151A101KAR							
150 220 330	SR.....A151KAR SR.....A221KAR SR.....A331KAR							
390 470 680	SR.....A391KAR SR.....A471KAR SR.....A681KAR							
1000 1500 2200	SR211A102KAR SR.....A152KAR SR.....A222KAR							
3900 4700 6800	SR.....A392KAR SR.....A472KAR SR.....A682KAR							
8200 10,000 15,000	SR.....A822KAR SR305A103KAR SR.....A153KAR							
22,000 33,000 39,000	SR.....A223KAR SR.....A333KAR SR.....A393KAR							
47,000 68,000 100,000	SR.....A473KAR SR.....A683KAR SR.....A104KAR							

For other styles, voltages, tolerances and lead lengths see Part No. Codes or contact factory.

*Other capacitance values available upon special request.

 = Industry preferred values
 = SR20 only

Capacitance ranges available for SR12 and SR07 same as SR15
 SR62 and SR59 same as SR21
 SR64 and SR65 same as SR30
 SR75 same as SR40
 SR13 same as SR21

NOTE: For others voltages, tolerances, electrical specifications and NPO typical characteristics, see the AVX Multilayer Ceramic Leaded Capacitors Catalog.



Radial Leads/SkyCap®/SR Series



X7R Dielectric

SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	SR15	SR20	SR21	SR22	SR27	SR30	SR40	SR50
AVX "Insertable"	SR07	SR29	SR59	N/A	N/A	SR65	SR75	N/A
Width (W)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Height (H)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Thickness (T)	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	3.81 (.150)	3.81 (.150)	5.08 (.200)
Lead Spacing (L.S.)	2.54 (.100)	2.54 (.100)	5.08 (.200)	6.35 (.250)	7.62 (.300)	5.08 (.200)	5.08 (.200)	10.16 (.400)
Lead Diameter (L.D.)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)
Cap. in.* pF	Industry Preferred Values in Blue	WVDC 200 100 50	WVDC 200 100 50	WVDC 200 100 50	WVDC 100 50	WVDC 100 50	WVDC 200 100 50	WVDC 200 100 50
470 1000 1500	SR.....C471KAR SR155C102KAR SR.....C152KAR							
2200 3300 4700	SR.....C222KAR SR.....C332KAR SR.....C472KAR							
6800 10,000 15,000	SR.....C682KAR SR215C103KAR SR.....C153KAR							
22,000 33,000 47,000	SR.....C223KAR SR.....C333KAR SR.....C473KAR							
68,000 100,000 150,000	SR.....C683KAR SR215C104KAR SR.....C154KAR							
220,000 330,000 390,000	SR215C224KAR SR.....C334KAR SR.....C394KAR							
470,000 1.0 uF 2.2 uF	SR305C474KAR SR305C105KAR SR405C225KAR							
2.7 uF 4.7 uF 10.0 uF	SR505C275KAR SR505C475KAR SR655C106KAR							

For other styles, voltages, tolerances and lead lengths see Part No. Codes or contact factory.

-  = Industry preferred values
-  = Extended range
-  = Extended range with 0.150" thickness maximum

Radial Leads/SkyCap®/SR Series



Z5U Dielectric

SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	SR15	SR20	SR21	SR22	SR27	SR30	SR40	SR50
AVX "Insertable"	SR07	SR29	SR59	N/A	N/A	SR65	SR75	N/A
Width (W)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Height (H)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	7.62 (.300)	10.16 (.400)	12.70 (.500)
Thickness (T)	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	3.81 (.150)	3.81 (.150)	5.08 (.200)
Lead Spacing (L.S.)	2.54 (.100)	2.54 (.100)	5.08 (.200)	6.35 (.250)	7.62 (.300)	5.08 (.200)	5.08 (.200)	10.16 (.400)
Lead Diameter (L.D.)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)
Cap. in.* Industry Preferred pF Values in Blue	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50
10,000 SR15E103ZAR								
47,000 SR.....E473ZAR								
100,000 SR215E104ZAR								
150,000 SR.....E154ZAR								
220,000 SR215E224ZAR								
330,000 SR215E334ZAR								
470,000 SR215E474ZAR								
680,000 SR.....E684ZAR								
1.0 µF SR.....105ZAR								
1.5 µF SR30E155ZAR								
2.2 µF SR30E225ZAR								
3.3 µF SR30E335ZAR								
4.7 µF SR30E475ZAR								

For other styles, voltages, tolerances and lead lengths see Part No. Codes or contact factory.

*Other capacitance values available upon special request.

 = Industry preferred values
 = SR20 only

Capacitance ranges available for SR12 and SR07 same as SR15
 SR62 and SR59 same as SR21
 SR64 and SR65 same as SR30
 SR75 same as SR40
 SR13 same as SR21

NOTE: For others voltages, tolerances, electrical specifications and NPO typical characteristics, see the AVX Multilayer Ceramic Leaded Capacitors Catalog.

AVX 500 VOLT SKYCAPS**

STYLE*	MAXIMUM CAPACITANCE VALUE	
	C0G (NP0)	X7R
SR29	900 pF	.015 µF
SR20	1800 pF	.033 µF
SR28 SR59	900 pF	.015 µF
SR13 SR21	1800 pF	.033 µF
SR30 SR61 SR65	7200 pF	.12 µF
SR40 SR75	.015 µF	.27 µF
SR22	1800 pF	.033 µF
SR27	1800 pF	.033 µF
SR76	.015 µF	.27 µF
SR50	.036 µF	.59 µF

*Consult pages 27 and 28 for style sizes.

**Voltage rating based on DWV of 150% of rated voltage.

