

Radial Leads/SkyCap®/SR Series



GENERAL INFORMATION

AVX SR Series

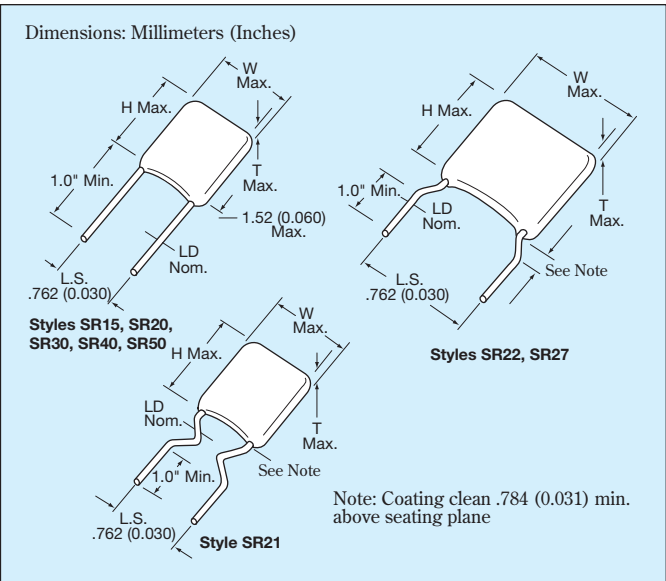
Conformally Coated Radial Ledged MLC

Temperature Coefficients: COG (NP0), X7R, Z5U

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

Case Material: Epoxy

Lead Material: RoHS Compliant, 100% Tin



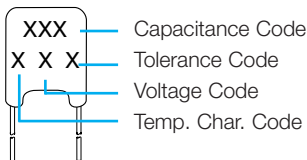
HOW TO ORDER

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 = $\pm 0.25\text{pF}$ D = $\pm 0.5\text{pF}$ F = $\pm 1\%$ ($>50\text{pF}$ only) G = $\pm 2\%$ ($>25\text{pF}$ only) J = $\pm 5\%$ K = $\pm 10\%$ X7R: J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$ Z5U: M = $\pm 20\%$ Z = $\pm 80\%$ -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 34-35.

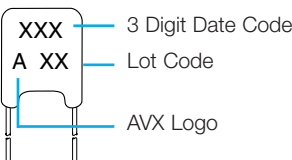


MARKING

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 34 and 35.



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.* Industry Preferred pF Values in Blue		WVDC			WVDC			WVDC			WVDC			WVDC			WVDC			WVDC			WVDC	
		200	100	50	200	100	50	200	100	50	200	100	50	200	100	50	100	50	100	50	100	50		
1.0-9.9	SR151A1R0DAR																							
10	SR151A100KAR																							
15	SR.....A150KAR																							
22	SR.....A220KAR																							
33	SR.....A330KAR																							
39	SR.....A390KAR																							
47	SR.....A470KAR																							
68	SR.....A680KAR																							
100	SR151A101KAR																							
150	SR.....A151KAR																							
220	SR.....A221KAR																							
330	SR.....A331KAR																							
390	SR.....A391KAR																							
470	SR.....A471KAR																							
680	SR.....A681KAR																							
1000	SR211A102KAR																							
1500	SR.....A152KAR																							
2200	SR.....A222KAR																							
3900	SR.....A392KAR																							
4700	SR.....A472KAR																							
6800	SR.....A682KAR																							
8200	SR.....A822KAR																							
10,000	SR305A103KAR																							
15,000	SR.....A153KAR																							
22,000	SR.....A223KAR																							
33,000	SR.....A333KAR																							
39,000	SR.....A393KAR																							
47,000	SR.....A473KAR																							
68,000	SR.....A683KAR																							
100,000	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.* Industry Preferred pF Values in Blue	WVDC 200 100 50	WVDC 200 100 50	WVDC 200 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 200 100 50	WVDC 200 100 50
470 1000 1500	SR.....C471KAA SR155C102KAA SR.....C152KAA							
2200 3300 4700	SR.....C222KAA SR.....C332KAA SR.....C472KAA							
6800 10,000 15,000	SR.....C682KAA SR215C103KAA SR.....C153KAA							
22,000 33,000 47,000	SR.....C223KAA SR.....C333KAA SR.....C473KAA							
68,000 100,000 150,000	SR.....C683KAA SR215C104KAA SR.....C154KAA							
220,000 330,000 390,000	SR215C224KAA SR.....C334KAA SR.....C394KAA							
470,000 1.0 uF 2.2 uF	SR305C474KAA SR305C105KAA SR405C225KAA							
2.7 uF 4.7 uF 10.0 uF	SR505C275KAA SR505C475KAA SR655C106KAA							

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 28 and 29 for style sizes.

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