

RADIAL LEADS

SkyCap®/SR Series



GENERAL INFORMATION

AVX SR Series

Conformally Coated Radial Leaded MLC

Temperature Coefficients: C0G (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

Voltage

Temperature Coefficient

Capacitance

Capacitance Tolerance

Failure Rate

Leads

Packaging

SR15
SR20
SR21
SR22
SR27
SR30
SR40
SR50

5 = 50V
1 = 100V
2 = 200V
9 = 300V
8 = 400V
7 = 500V

A = C0G (NP0)
C = X7R
E = Z5U

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.)

C0G (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 = $+80\%$ -20%

A = Not Applicable

R = RoHS

Blank: Bulk Packaging 1.0" minimum of lead length
T: Trimmed leads .230" $\pm$.030"
Bulk packaging
TR1: Tape and Reel Packaging
AP1: Ammopack packaging

See packaging specification pages 33-34



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

COG (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			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	SR....A103KAR																					
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

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	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC
		200 100 50	200 100 50	200 100 50	200 100 50	200 100 50	200 100 50	200 100 50	200 100 50
470	SR____C471KAR								
1000	SR155C102KAR								
1500	SR____C152KAR								
2200	SR____C222KAR								
3300	SR____C332KAR								
4700	SR____C472KAR								
6800	SR____C682KAR								
10,000	SR215C103KAR								
15,000	SR____C153KAR								
22,000	SR____C223KAR								
33,000	SR____C333KAR								
47,000	SR____C473KAR								
68,000	SR____C683KAR								
100,000	SR215C104KAR								
150,000	SR____C154KAR								
220,000	SR215C224KAR								
330,000	SR____C334KAR								
390,000	SR____C394KAR								
470,000	SR305C474KAR								
1.0 uF	SR305C105KAR								
2.2 uF	SR405C225KAR								
2.7 uF	SR505C275KAR								
4.7 uF	SR505C475KAR								
10.0 uF	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

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.* pF	Industry Preferred Values in Blue	WVDC		WVDC		WVDC		WVDC		WVDC		WVDC		WVDC		WVDC	
		100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
10,000	SR155E103ZAR																
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 (NPO)	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

*Consult pages 27 and 28 for style sizes.

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