

# Radial Leads/SkyCap®/SR Series



## GENERAL INFORMATION

### AVX SR Series

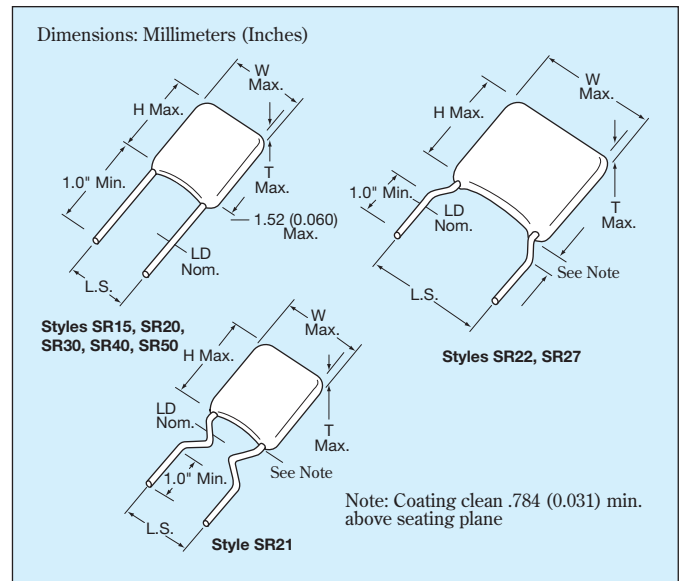
Conformally Coated Radial Ledged MLC

Temperature Coefficients: COG (NP0), X7R, Z5U

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

Case Material: Epoxy

Lead Material: RoHS Compliant, 100% Tin



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

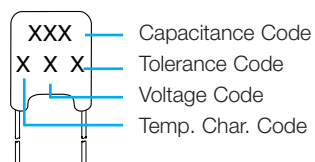
## HOW TO ORDER

<b>SR21</b>	<b>5</b>	<b>E</b>	<b>104</b>	<b>M</b>	<b>A</b>	<b>R</b>	<b>TR1</b>
<b>AVX Style</b> SR15 SR20 SR21 SR22 SR27 SR30 SR40 SR50	<b>Voltage</b> 5 = 50V 1 = 100V 2 = 200V 9 = 300V 8 = 400V 7 = 500V	<b>Temperature Coefficient</b> A = COG (NP0) C = X7R E = Z5U	<b>Capacitance</b> 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.)	<b>Capacitance Tolerance</b> COG (NP0): C = ±.25pF D = ±.5pF F = ±1% (>50pF only) G = ±2% (>25pF only) J = ±5% K = ±10%	<b>Failure Rate</b> A = Not Applicable	<b>Leads</b> R = RoHS Long Lead 1.0" minimum	<b>Packaging</b> Blank = Bulk Packaging T = Trimmed Leads .230"± .030" Bulk packaging TR1 = Tape and Reel Packaging AP1 = Ammopack Packaging  See packaging specification page 33-34.

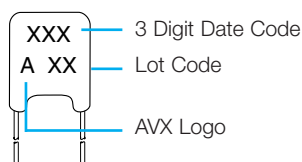


## MARKING

### 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/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															
<b>Width (W)</b>	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	7.62 (.300)	10.16 (.400)	12.70 (.500)															
<b>Height (H)</b>	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	7.62 (.300)	10.16 (.400)	12.70 (.500)															
<b>Thickness (T)</b>	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	3.81 (.150)	3.81 (.150)	5.08 (.200)															
<b>Lead Spacing (L.S.)</b>	2.54 (.100)	2.54 (.100)	5.08 (.200)	6.35 (.250)	7.62 (.300)	5.08 (.200)	5.08 (.200)	10.16 (.400)															
<b>Lead Diameter (L.D.)</b>	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)															
Cap. in.* pF	Industry Preferred Values in Blue	VVDC			VVDC			VVDC			VVDC			VVDC			VVDC						
		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																						
<b>10</b>	<b>SR151A100KAR</b>																						
15	SR.....A150KAR																						
22	SR.....A220KAR																						
33	SR.....A330KAR																						
39	SR.....A390KAR																						
47	SR.....A470KAR																						
68	SR.....A680KAR																						
<b>100</b>	<b>SR151A101KAR</b>																						
150	SR.....A151KAR																						
220	SR.....A221KAR																						
330	SR.....A331KAR																						
390	SR.....A391KAR																						
470	SR.....A471KAR																						
680	SR.....A681KAR																						
<b>1000</b>	<b>SR211A102KAR</b>																						
1500	SR.....A152KAR																						
2200	SR.....A222KAR																						
3900	SR.....A392KAR																						
4700	SR.....A472KAR																						
6800	SR.....A682KAR																						
8200	SR.....A822KAR																						
<b>10,000</b>	<b>SR305A103KAR</b>																						
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											
<b>Width (W)</b>	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	7.62 (.300)	10.16 (.400)	12.70 (.500)											
<b>Height (H)</b>	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	7.62 (.300)	10.16 (.400)	12.70 (.500)											
<b>Thickness (T)</b>	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	3.81 (.150)	3.81 (.150)	5.08 (.200)											
<b>Lead Spacing (L.S.)</b>	2.54 (.100)	2.54 (.100)	5.08 (.200)	6.35 (.250)	7.62 (.300)	5.08 (.200)	5.08 (.200)	10.16 (.400)											
<b>Lead Diameter (L.D.)</b>	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)											
Cap. in.* 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	
470 pF SR.....C471KAR																			
1000 pF SR155C102KAR																			
1500 pF SR.....C152KAR																			
2200 pF SR.....C222KAR																			
3300 pF SR.....C332KAR																			
4700 pF SR.....C472KAR																			
6800 pF SR.....C682KAR																			
10,000 pF SR215C103KAR																			
15,000 pF SR.....C153KAR																			
22,000 pF SR.....C223KAR																			
33,000 pF SR.....C333KAR																			
47,000 pF SR.....C473KAR																			
68,000 pF SR.....C683KAR																			
100,000 pF SR215C104KAR																			
150,000 pF SR.....C154KAR																			
220,000 pF SR215C224KAR																			
330,000 pF SR.....C334KAR																			
390,000 pF SR.....C394KAR																			
470,000 pF 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/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 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 47,000 100,000	SR15E103ZAR SR.....E473ZAR SR215E104ZAR							
150,000 220,000 330,000	SR.....E154ZAR SR215E224ZAR SR215E334ZAR							
470,000 680,000	SR215E474ZAR SR.....E684ZAR							
1.0 µF 1.5 µF 2.2 µF	SR.....105ZAR SR30E155ZAR SR30E225ZAR							
3.3 µF 4.7 µF	SR30E335ZAR 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
SR50	.036 µF	.59 µF

\*Consult pages 27 and 28 for style sizes.

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

