

# Radial Leads/SkyCap®/SR Series



## GENERAL INFORMATION

### AVX SR Series

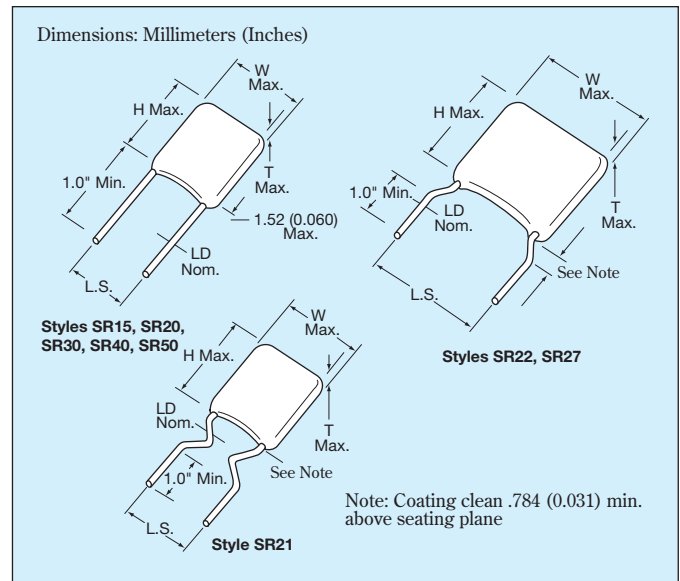
Conformally Coated Radial Ledged MLC

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.

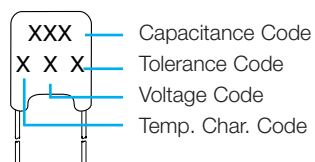
## HOW TO ORDER

<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>Capacitance Tolerance</b> X7R: J = ±5% K = ±10% M = ±20% Z5U: M = ±20% Z = +80% -20%	<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.

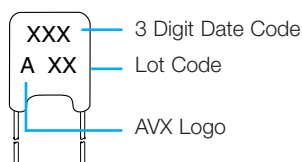


## MARKING

### 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)
<b>Cap. in.* Industry Preferred pF</b>	<b>Values in Blue</b>	<b>WVDC</b>	<b>WVDC</b>	<b>WVDC</b>	<b>WVDC</b>	<b>WVDC</b>	<b>WVDC</b>	<b>WVDC</b>
		200 100 50	200 100 50	200 100 50	200 100 50	200 100 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		
	200	100	50	200	100	50	200	100	50	200	100	50	200	100	50	200	100	50
470 pF SR.....C471KAR																		
<b>1000 pF SR155C102KAR</b>																		
1500 pF SR.....C152KAR																		
2200 pF SR.....C222KAR																		
3300 pF SR.....C332KAR																		
4700 pF SR.....C472KAR																		
6800 pF SR.....C682KAR																		
<b>10,000 pF SR215C103KAR</b>																		
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																		
<b>100,000 pF SR215C104KAR</b>																		
150,000 pF SR.....C154KAR																		
<b>220,000 pF SR215C224KAR</b>																		
330,000 pF SR.....C334KAR																		
390,000 pF SR.....C394KAR																		
<b>470,000 pF SR305C474KAR</b>																		
<b>1.0 uF SR305C105KAR</b>																		
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.

