

# 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

SR21	5	E	104	M	A	R	TR1
<b>AVX Style</b>	<b>Voltage</b>	<b>Temperature Coefficient</b>	<b>Capacitance</b>	<b>Capacitance Tolerance</b>	<b>Failure Rate</b>	<b>Leads</b>	<b>Packaging</b>
SR15 SR20 SR21 SR22 SR27 SR30 SR40 SR50	5 = 50V 1 = 100V 2 = 200V 9 = 300V 8 = 400V 7 = 500V	A = COG (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)	COG (NP0): C = ±.25pF D = ±.5pF F = ±1% (>50pF only) G = ±2% (>25pF only) J = ±5% K = ±10%	X7R: J = ±5% K = ±10% M = ±20% Z5U: M = ±20% Z = +80% -20%	A = Not Applicable R = RoHS	Blank: Bulk Packaging 1.0" minimum of lead length T: Trimmed leads .230" ± .030" Bulk packaging TR1: Tape and Reel Packaging AP1: Ammopack packaging  See packaging specification pages 33-34



### MARKING



### 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												
<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	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
1.0-9.9	SR151A1R0DAR																			
10	<b>SR151A100KAR</b>																			
15	SR....A150KAR																			
22	SR....A220KAR																			
33	SR....A330KAR																			
39	SR....A390KAR																			
47	SR....A470KAR																			
68	SR....A680KAR																			
100	<b>SR151A101KAR</b>																			
150	SR....A151KAR																			
220	SR....A221KAR																			
330	SR....A331KAR																			
390	SR....A391KAR																			
470	SR....A471KAR																			
680	SR....A681KAR																			
1000	<b>SR211A102KAR</b>																			
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.



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at [www.avx.com/disclaimer/](http://www.avx.com/disclaimer/) by reference and should be reviewed in full before placing any order.

# RADIAL LEADS

## X7R Dielectric



### SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

EIA Characteristic	AVX Style	SR15			SR20			SR21			SR22			SR27			SR30			SR40			SR50		
	AVX "Insertable"	SR07	SR07	SR07	SR29	SR29	SR29	SR59	SR59	SR59	N/A	N/A	N/A	N/A	N/A	SR65	SR65	SR65	SR75	SR75	SR75	N/A	N/A	N/A	
Width (W)		3.81 (.150)	3.81 (.150)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.604 (.260)	6.604 (.260)	6.604 (.260)	7.62 (.300)	7.62 (.300)	7.62 (.300)	10.16 (.400)	10.16 (.400)	10.16 (.400)	12.70 (.500)	12.70 (.500)	12.70 (.500)	
Height (H)		3.81 (.150)	3.81 (.150)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	6.35 (.250)	6.35 (.250)	7.62 (.300)	7.62 (.300)	7.62 (.300)	10.16 (.400)	10.16 (.400)	10.16 (.400)	12.70 (.500)	12.70 (.500)	12.70 (.500)	
Thickness (T)		2.54 (.100)	2.54 (.100)	2.54 (.100)	3.175 (.125)	3.175 (.125)	3.175 (.125)	3.175 (.125)	3.175 (.125)	3.175 (.125)	3.175 (.125)	3.175 (.125)	4.06 (.160)	4.06 (.160)	4.06 (.160)	3.81 (.150)	3.81 (.150)	3.81 (.150)	3.81 (.150)	3.81 (.150)	3.81 (.150)	5.08 (.200)	5.08 (.200)	5.08 (.200)	
Lead Spacing (L.S.)		2.54 (.100)	2.54 (.100)	2.54 (.100)	2.54 (.100)	2.54 (.100)	2.54 (.100)	5.08 (.200)	5.08 (.200)	5.08 (.200)	6.35 (.250)	6.35 (.250)	7.62 (.300)	7.62 (.300)	7.62 (.300)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	5.08 (.200)	10.16 (.400)	10.16 (.400)	10.16 (.400)	
Lead Diameter (L.D.)		.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.508 (.020)	.635 (.025)	.635 (.025)	.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 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 100 50	WVDC 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.

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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.



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