Radial Leads/SkyCap®/SR Series

GENERAL INFORMATION

AVX SR Series

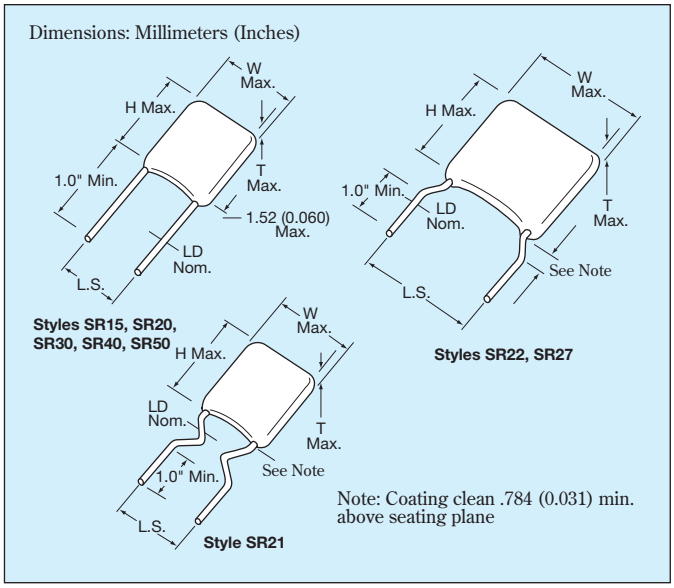
Conformally Coated Radial Leaded MLC

Temperature Coefficients: C0G (NP0), X7R, Z5U

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

Case Material: Epoxy

Lead Material: RoHS Compliant, 100% Tin



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

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 = C0G (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

C0G (NP0):	X7R:
C = ±.25pF	J = ±5%
D = ±.5pF	K = ±10%
F = ±1% (>50pF only)	M = ±20%
G = ±2% (>25pF only)	Z5U:
J = ±5%	M = ±20%
K = ±10%	Z = +80% -20%

Failure Rate
A = Not Applicable

Leads
R = RoHS Long Lead 1.0" minimum

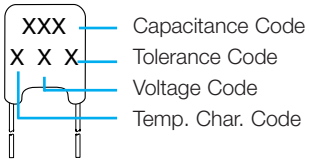
Packaging
Blank = Bulk Packaging
T = Trimmed Leads .230"± .030" Bulk packaging
TR1 = Tape and Reel Packaging
AP1 = Ammopack Packaging

See packaging specification page 33-34.

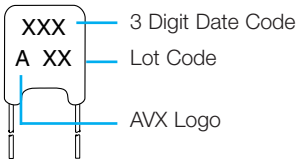
RoHS COMPLIANT

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
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	SR15 WVDC 200	SR15 WVDC 100	SR15 WVDC 50	SR20 WVDC 200	SR20 WVDC 100	SR20 WVDC 50	SR21 WVDC 200	SR21 WVDC 100	SR21 WVDC 50	SR22 WVDC 200	SR22 WVDC 100	SR22 WVDC 50	SR27 WVDC 200	SR27 WVDC 100	SR27 WVDC 50	SR30 WVDC 100	SR30 WVDC 50	SR40 WVDC 100	SR40 WVDC 50	SR50 WVDC 100	SR50 WVDC 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.* pF	Industry Preferred Values in Blue	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 100	50	WVDC 100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 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/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.* 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	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.**

= 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 27 and 28 for style sizes.

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

Mouser Electronics

Authorized Distributor

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AVX:

SR221C104KAA SR201C103KAATR2 SR405C225JAA SR221A681KAA SR301A223KAT SR505A223JAA SR212A360GAA SR211C563JAA SR215A682JAA SR155C392KAA SR211A122JAATR1 SR215E154MAA SR211A152KAA SR215A472FAA SR211C153JAATR1 SR305C474MAA SR751C105JAATR2 SR215A102KAA SR215C152KAATR2 SR301E474MAATR1 SR211A272GAATR1 SR301E105ZAATR1 SR291C103KAT SR212A221JAA SR121C103KAATR2 SR212A121JAA SR211A332JAT SR215C103KAAAP2 SR152A470KAATR1 SR212A391KAA SR301A223GAA SR305A103KAATR2 SR211C332KAT SR211A561KAA SR505E225MAATR1 SR405A683JAT SR211A682FAATR1 SR151A181JAATR2 SR202C103MAA SR201C683MAA SR211A821JAA SR211A332FAA SR301A822JAA SR071A391JAA SR592A101KAATR1 SR221C223KAA SR215A102FAA SR275C682KAT SR295C332KAT SR152A390JAATR1 SR211A682JAA SR655C105MAA SR201C393KAA SR151C392KAA SR215C823KAA SR211E103ZAA SR305C105JAATR1 SR201A272JAATR1 SR301C394KAATR1 SR075C472KAATR1 SR212A220KAATR1 SR211A471GAATR1 SR152A100KAA SR215C682MAATR1 SR405E475MAATR1 SR301E474ZAA SR595E334MAATR1 SR211C823KAA SR752C224MAATR1 SR215C104MAT SR212A270KAATR1 SR205C683MAA SR275E224ZAA SR215C333MAA SR205C104JAATR1 SR152A390KAA SR201A102JAT SR215A222JAT SR201C473JAATR1 SR595C153KAA SR221C473KAA SR301A103FAATR1 SR211C152JAA SR211A102FAT SR151C821KAA SR205C393KAA SR202A751JAA SR501C474KAA SR201A102KAATR1 SR305E225ZAATR1 SR212A180JAA SR152A101KAA SR151A101JAT SR215E473ZAA SR211C223JAA SR201A272KAA SR205C473KAATR1 SR215C223JAA SR225C103KAA SR211A332JAA