GENERAL INFORMATION

AVX SR Series

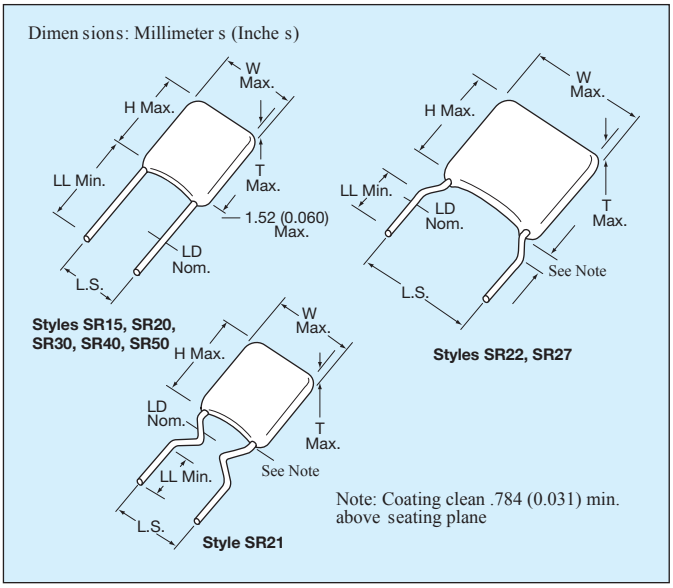
Conformally Coated Radial Leaded MLC

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	Voltage	Temperature Coefficient	Capacitance	Capacitance Tolerance	Failure Rate	Leads	Packaging

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):
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%

Failure Rate
A = Not Applicable

Leads
R = RoHS

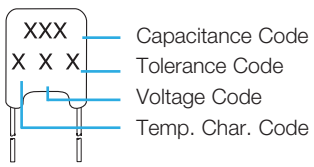
Packaging
Blank: Bulk Packaging 1.0" minimum of lead length
T: Trimmed leads .230" ± .030" Bulk packaging
TR1: Tape and Reel Packaging
AP1: Ammopack packaging

See packaging specification pages 33-34

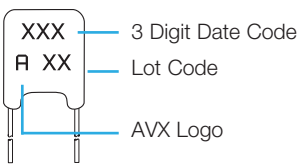
RoHS COMPLIANT

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.

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

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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	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.

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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	WVDC			WVDC			WVDC			WVDC			WVDC			WVDC			WVDC			WVDC		
pF	Values in Blue	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**

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

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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

*Consult pages 27 and 28 for style sizes.

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

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