

## GENERAL INFORMATION

**AVX SR Series**

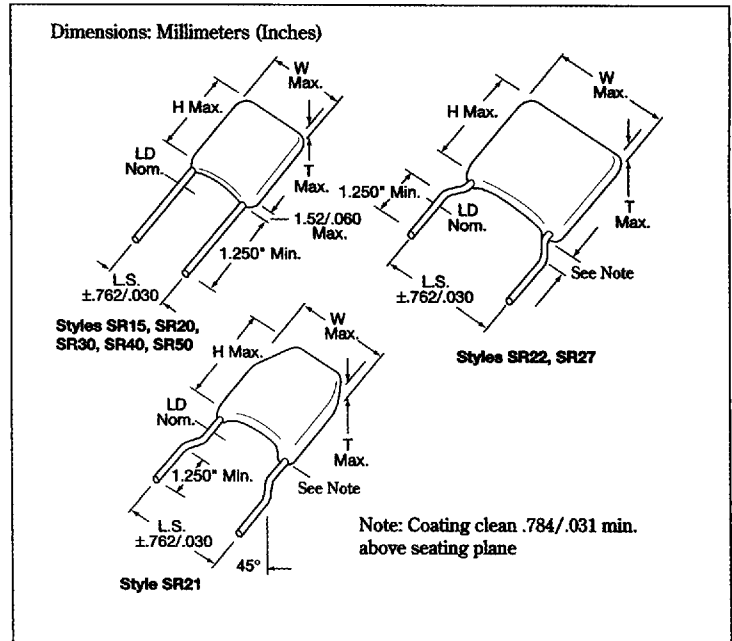
**Conformally Coated Radial Leaded MLC**

**Temperature Coefficients: NP0, X7R, Z5U**

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

**Case Material: Epoxy**

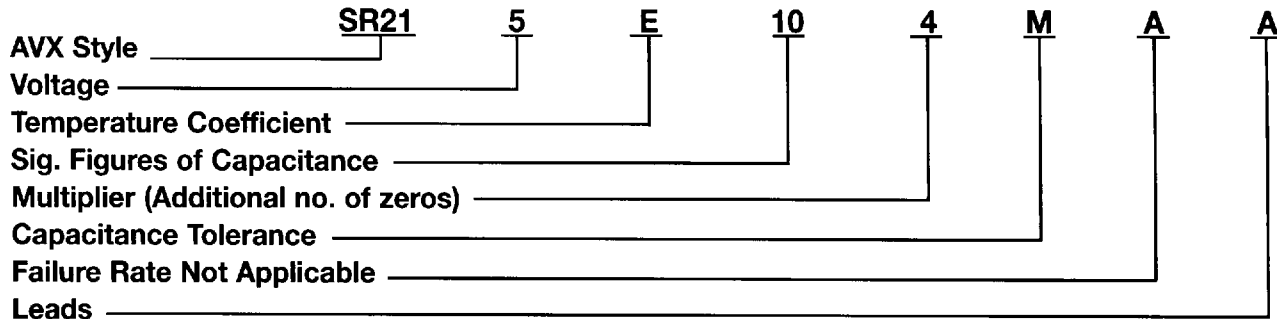
**Lead Material: Solderable**



## HOW TO ORDER

**AVX Styles: SR15, SR20, SR21, SR22, SR27, SR30, SR40, SR50**

**Part Number Example**



### Part Number Codes

**Voltages:** 50V = 5, 100V = 1, 200V = 2, 300V = 9, 400V = 8, 500V = 7

**Temp. Coefficient:** NP0 = A, X7R = C, Z5U = E

### Sig. Figures of Capacitance and Multiplier:

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 = 1.4 pF).

### Capacitance Tolerances:

NP0: C = ±.25pF, D = ±.5pF, F = ±1.0% (>50 pF only), G = ±2.0% (>25 pF only), J = ±5%, K = ±10%

X7R: J = ±5%, K = ±10%, M = ±20%

Z5U: M = ±20%, Z = +80%, -20%

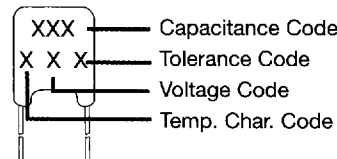
Tolerance Codes F and G are not available in SR15.

**Failure Rate:** A = Not Applicable

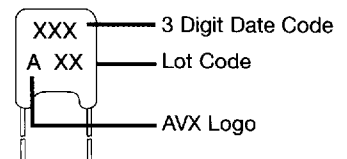
**Leads:** T = Trimmed Leads, .230" ± .030"  
A = Long Leads, 1.25" minimum

## 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 24 and 25.

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.* 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	100	50	100	50
1.0-9.9	SR151A1R0DAA															
10	SR151A100KAA	■														
15	SR.....A150KAA															
22	SR.....A220KAA															
33	SR.....A330KAA			▨												
39	SR.....A390KAA															
47	SR.....A470KAA															
68	SR.....A680KAA															
100	SR151A101KAA	■														
150	SR.....A151KAA			▨												
220	SR.....A221KAA															
330	SR.....A331KAA															
390	SR.....A391KAA															
470	SR.....A471KAA															
680	SR.....A681KAA															
1000	SR211A102KAA		■			■		■		■						
1500	SR.....A152KAA															
2200	SR.....A222KAA															
3900	SR.....A392KAA															
4700	SR.....A472KAA															
6800	SR.....A682KAA															
8200	SR.....A822KAA															
10,000	SR305A103KAA									■						
15,000	SR.....A153KAA															
22,000	SR.....A223KAA															
33,000	SR.....A333KAA															
39,000	SR.....A393KAA															
47,000	SR.....A473KAA															
68,000	SR.....A683KAA															
100,000	SR.....A104KAA															

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

▨ = Available in tight tolerances only

X7R Dielectric

## SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	SR15	SR20	SR21	SR22	SR27	SR30	SR40	SR50								
<b>AVX "Insertable"</b>	<b>SR07</b>	<b>SR29</b>	<b>SR59</b>	<b>N/A</b>	<b>N/A</b>	<b>SR65</b>	<b>SR75</b>	<b>N/A</b>								
<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 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>		<b>WVDC</b>	
	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
470	SR.....C471KAA															
<b>1000</b>	<b>SR155C102KAA</b>															
1500	SR.....C152KAA															
2200	SR.....C222KAA															
3300	SR.....C332KAA															
4700	SR.....C472KAA															
6800	SR.....C682KAA															
<b>10,000</b>	<b>SR215C103KAA</b>															
15,000	SR.....C153KAA															
22,000	SR.....C223KAA															
33,000	SR.....C333KAA															
47,000	SR.....C473KAA															
68,000	SR.....C683KAA															
<b>100,000</b>	<b>SR215C104KAA</b>															
150,000	SR.....C154KAA															
<b>220,000</b>	<b>SR215C224KAA</b>															
330,000	SR.....C334KAA															
390,000	SR.....C394KAA															
<b>470,000</b>	<b>SR305C474KAA</b>															
<b>1.0 µF</b>	<b>SR305C105KAA</b>															
2.2 µF	SR405C225KAA															
2.7 µF	SR505C275KAA															
4.7 µF	SR505C475KAA															

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

## Z5U Dielectric

### SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	SR15	SR20	SR21	SR22	SR27	SR30	SR40	SR50
<b>AVX "Insertable"</b>	<b>SR07</b>	<b>SR29</b>	<b>SR59</b>	<b>N/A</b>	<b>N/A</b>	<b>SR65</b>	<b>SR75</b>	<b>N/A</b>
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	SR155E103ZAA							
47,000	SR.....E473ZAA							
100,000	SR215E104ZAA							
150,000	SR.....E154ZAA							
220,000	SR215E224ZAA							
330,000	SR215E334ZAA							
470,000	SR215E474ZAA							
680,000	SR.....E684ZAA							
1.0 µF	SR305E105ZAA							
1.5 µF	SR.....E155ZAA							
2.2 µF	SR.....E225ZAA							
3.3 µF	SR.....E335ZAA							
4.7 µF	SR.....E475ZAA							

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

### AVX 500 VOLT SKYCAPS\*\*

STYLE*	MAXIMUM CAPACITANCE VALUE	
	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 18 and 19 for style sizes.

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

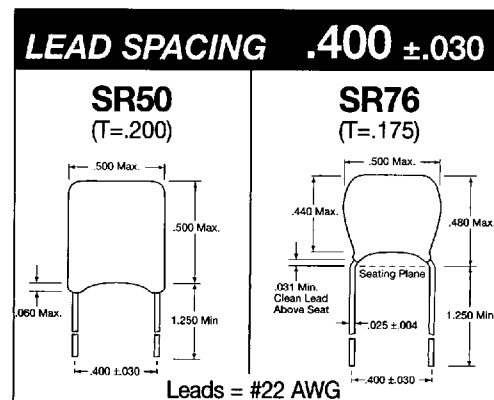
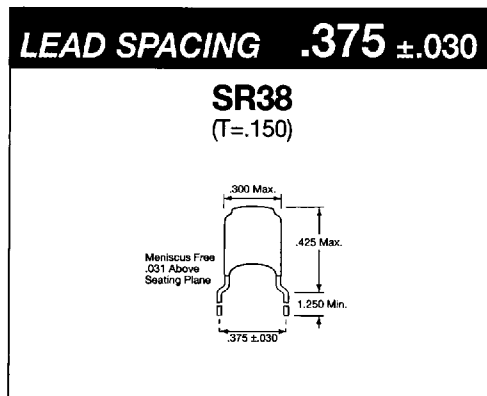
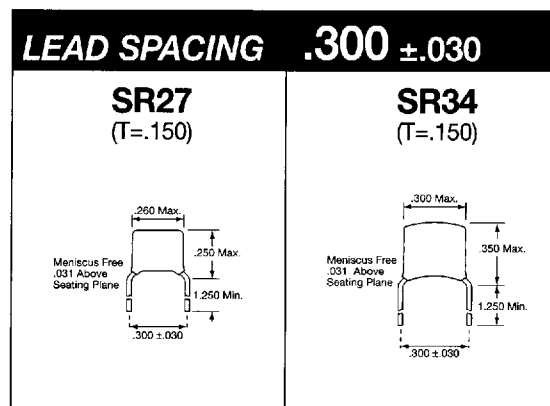
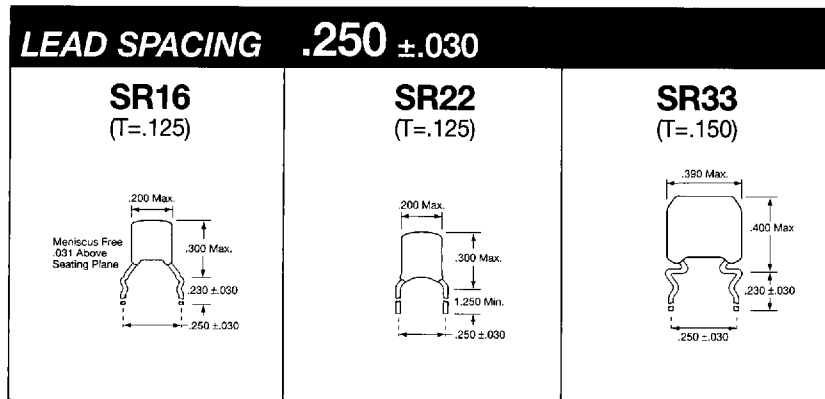
Configurations by Lead Spacing

LEAD SPACING <b>.100 ±.030</b>					Dimensions: Millimeters (Inches)
<b>SR14</b> (T=.125) 	<b>SR15*</b> (T=.100) 	<b>SR07*</b> (T=.100) 	<b>SR20*</b> (T=.125) 	<b>SR29*</b> (T=.125) 	

LEAD SPACING <b>.200 ±.030</b>				Dimensions: Millimeters (Inches)
<b>SR12*</b> (T=.125) 	<b>SR13*</b> (T=.125) 	<b>SR21*</b> (T=.125) 	<b>SR21-85*</b> (T=.125) 	

LEAD SPACING <b>.200 ±.030</b>						Dimensions: Millimeters (Inches)
<b>SR28*</b> (T=.125) 	<b>SR30*</b> (T=.150) 	<b>SR32*</b> (T=.150) 	<b>SR40*</b> (T=.150) 	<b>SR59*</b> (T=.125) 	<b>SR61</b> (T=.150) 	
<b>SR63*</b> (T=.150) 	<b>SR65*</b> (T=.150) 	<b>SR67</b> (T=.125) 	<b>SR75*</b> (T=.150) Leads = #22AWG 	<b>NOTES:</b> <ol style="list-style-type: none"> <li>1. All leads are #24 AWG unless otherwise noted.</li> <li>2. Available in tape and reel packaging(*).</li> <li>3. Other styles are also available, contact factory.</li> <li>4. (T = XXX) under type designation is maximum thickness in inches.</li> </ol>		

Configurations by Lead Spacing



- NOTES:**
1. All leads are #24 AWG unless otherwise noted.
  2. Available in tape and reel packaging(\*)
  3. Other styles are also available, contact factory.
  4. (T = XXX) under type designation is maximum thickness in inches.