

## GENERAL INFORMATION

**AVX SR Series**

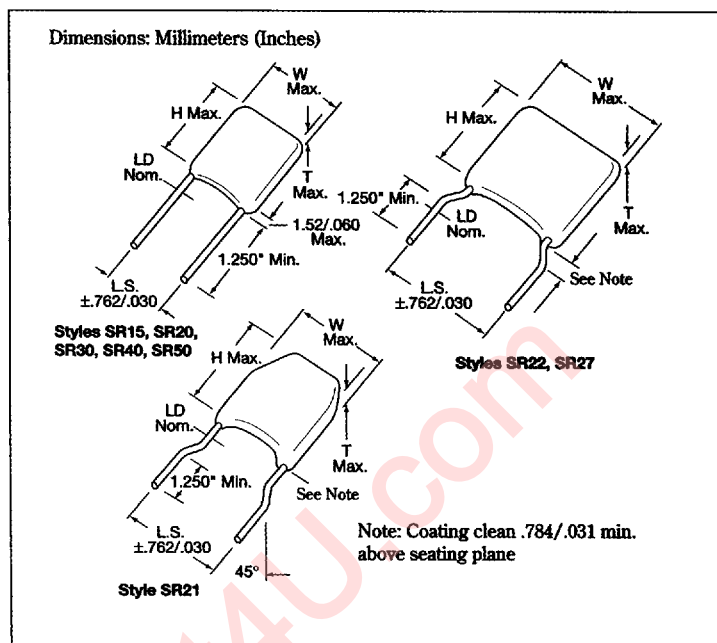
**Conformally Coated Radial Leaded MLC**

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

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

**Case Material: Epoxy**

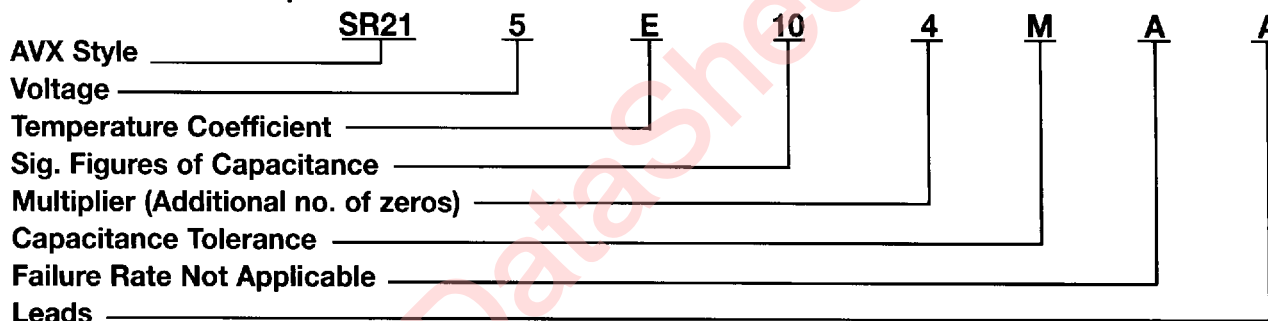
**Lead Material: Solderable**



## 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%

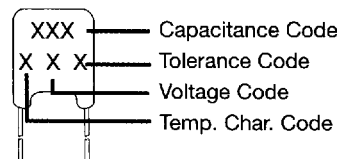
Tolerance Codes F and G are not available in SR15.

**Failure Rate:** A = Not Applicable

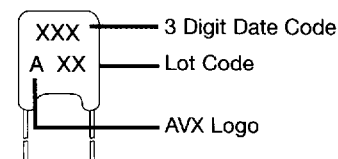
**Leads:** T = Trimmed Leads, .230" ± .030"  
A = Long Leads, 1.25" minimum

## 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														
<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>			
	200	100	50	200	100	50	200	100	50	200	100	50	200	100	50	200	100	50	200	100	50	
1.0-9.9	SR151A1R0DAA																					
<b>10</b>	<b>SR151A100KAA</b>	■																				
15	SR.....A150KAA																					
22	SR.....A220KAA																					
33	SR.....A330KAA			▨																		
39	SR.....A390KAA			▨																		
47	SR.....A470KAA			▨																		
68	SR.....A680KAA			▨																		
<b>100</b>	<b>SR151A101KAA</b>	■																				
150	SR.....A151KAA			▨																		
220	SR.....A221KAA			▨																		
330	SR.....A331KAA			▨																		
390	SR.....A391KAA																					
470	SR.....A471KAA																					
680	SR.....A681KAA																					
<b>1000</b>	<b>SR211A102KAA</b>		■			■		■		■												
1500	SR.....A152KAA		■			■		■														
2200	SR.....A222KAA		■			■		■														
3900	SR.....A392KAA																					
4700	SR.....A472KAA																					
6800	SR.....A682KAA																					
8200	SR.....A822KAA																					
<b>10,000</b>	<b>SR305A103KAA</b>												■									
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							
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	
		100	50	100	50	100	50	100	50	100	50	100	50	100	50
470	SR.....C471KAA														
1000	SR155C102KAA														
1500	SR.....C152KAA														
2200	SR.....C222KAA														
3300	SR.....C332KAA														
4700	SR.....C472KAA														
6800	SR.....C682KAA														
10,000	SR215C103KAA														
15,000	SR.....C153KAA														
22,000	SR.....C223KAA														
33,000	SR.....C333KAA														
47,000	SR.....C473KAA														
68,000	SR.....C683KAA														
100,000	SR215C104KAA														
150,000	SR.....C154KAA														
220,000	SR215C224KAA														
330,000	SR.....C334KAA														
390,000	SR.....C394KAA														
470,000	SR305C474KAA														
1.0 µF	SR305C105KAA														
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.* Industry Preferred pF 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 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.

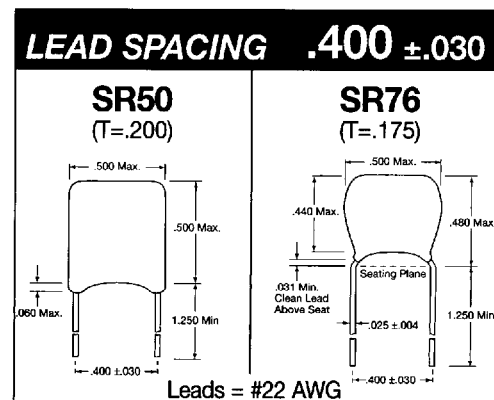
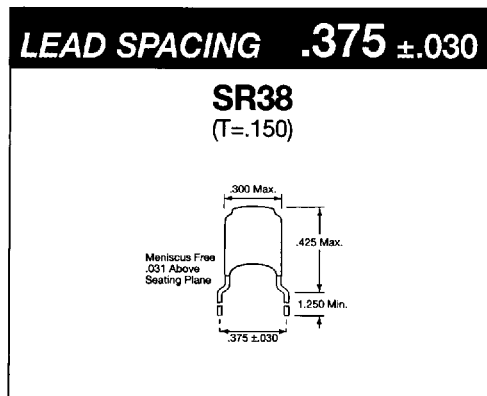
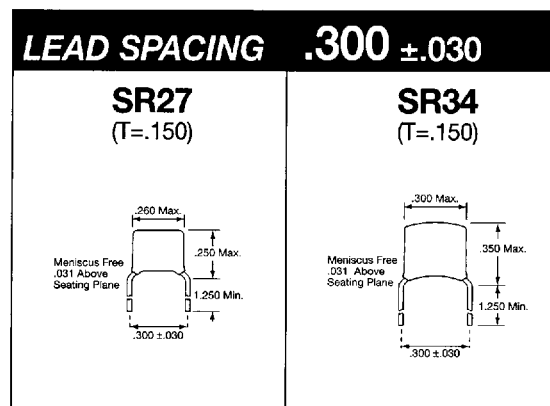
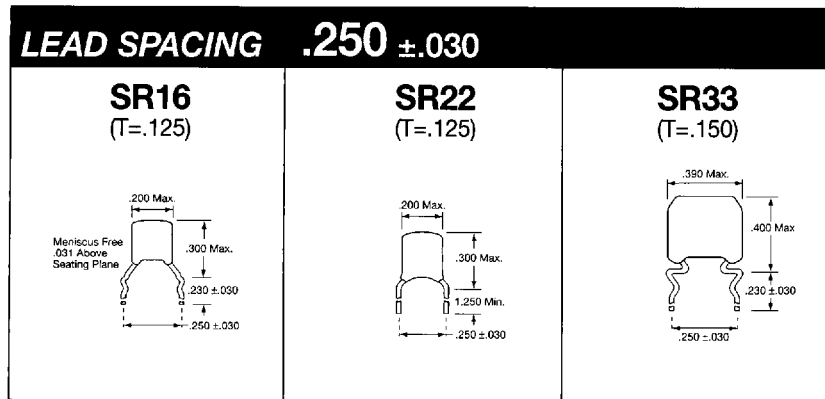
Configurations by Lead Spacing

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.