COG (NP0) Dielectric



SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

AVX Style	IA Characteristic Dimensions: Millimeters (inches)											
Width (W)												
(W) (.150) (.200) (.200) Height (H) 3.81 5.08 5.08 Thickness 2.54 3.175 3.175 (T) (.100) (.125) (.125) Lead Spacing (L.S.) 2.54 2.54 5.08 (L.S.) (.100) (.100) (.200) Lead Diameter (L.D.) (.020) (.020) (.020) Cap. Industry Preferred Values in Blue VVDC VVDC WVDC 1 ARA100A4R VVDC WVDC WVDC WVDC VVDC <												
Height (H)												
(H) (.150) (.200) (.200) Thickness (T) 2.54 3.175 3.175 (100) (.125) (.125) Lead Spacing (L.S.) 2.54 2.54 5.08 (L.D.) (.100) (.100) (.200) Lead Diameter (L.D.) (.020) (.020) (.020) (.020) (.020) (.020) (.020) Cap. Industry Preferred Nalues in Blue WVDC WVDC WVDC 1 ARA180D4R WVDC WVDC WVDC 1 ARA160K4R WVDC	` /											
Thickness (T) (.100) (.125) (.125) (.125) Lead Spacing (L.S.) (.100) (.100) (.200) Lead Diameter (L.D.) (.020) (.020) (.020) (.020) Cap. Industry Preferred Values in Blue 10 ARA150K4R 15 ARA150K4R 17 ARA390K4R 19 ARA151K4R 150 AR	9											
Cap. Industry Preferred VVDC												
Lead Spacing (L.S.)												
Cap. Industry Preferred WVDC WVDC WVDC												
Lead Diameter (L.D.) .508 (.020) .508 (.020) .508 (.020) Cap. in. pF Industry Preferred Values in Blue WVDC WVDC WVDC 1 ARA1R0D4R 0 50 200 100 50 200 100 50 10 ARA180D4R 0 0 50 200 100 50 200 100 50 50 200 100 50 50 200 100 50 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 50 200 100 200 100 200 100 200 100 200 100 200 100 200 100 200 200 200 200 200 200 200 200 200 200												
(I.D.) (.020) (<u> </u>			<u> </u>		
Cap. in. pF Industry Preferred Values in Blue WVDC WYDC												
in. pF Values in Blue 200 100 50 200 100 50 1 ARA1ROD4R	Can											
1 ARA1ROD4R 10 ARA100K4R 15 ARA150K4R 22 ARA220K4R 33 ARA330K4R 39 ARA390K4R 47 ARA470K4R 68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA331K4R 390 ARA3471K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA152K4R 1,500 ARA152K4R 3,900 ARA392K4R 4,700 ARA392K4R 6800 ARA392K4R			_									
10 ARA100K4R 15 ARA150K4R 22 ARA220K4R 33 ARA330K4R 39 ARA390K4R 47 ARA470K4R 68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA331K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA102K4R 3,900 ARA122K4R 3,900 ARA392K4R 4,700 ARA392K4R	-	ARA1R0D4R										
22 ARA220K4R 33 ARA330K4R 39 ARA390K4R 47 ARA470K4R 68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA102K4R 2,200 ARA102K4R 3,900 ARA102K4R 4,700 ARA392K4R 6800 ARA392K4R	10											
33	15	ARA150K4R										
39 ARA390K4R 47 ARA470K4R 68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA331K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA122K4R 2,200 ARA122K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA472K4R	22	ARA220K4R										
47 ARA470K4R 68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,500 ARA152K4R 2,200 ARA152K4R 3,900 ARA392K4R 4,700 ARA392K4R 6800 ARA472K4R 6800 ARA472K4R	33	ARA330K4R										
68 ARA680K4R 100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	39	ARA390K4R										
100 ARA101K4R 150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA682K4R 6800 ARA682K4R	47	ARA470K4R										
150 ARA151K4R 220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	68	ARA680K4R										
220 ARA221K4R 330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	100	ARA101K4R										
330 ARA331K4R 390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	150	ARA151K4R										
390 ARA391K4R 470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	220	ARA221K4R										
470 ARA471K4R 680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	330	ARA331K4R										
680 ARA681K4R 1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	390	ARA391K4R										
1,000 ARA102K4R 1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	470	ARA471K4R										
1,500 ARA152K4R 2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	680	ARA681K4R										
2,200 ARA222K4R 3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	1,000	ARA102K4R										
3,900 ARA392K4R 4,700 ARA472K4R 6800 ARA682K4R	1,500	ARA152K4R										
4,700 ARA472K4R 6800 ARA682K4R	2,200											
6800 ARA682K4R												
	4,700	ARA472K4R										
8200 ARA822K4R	8200	ARA822K4R										

Notes:

"Insertable" make reference to alternative AVX style using the same range of capacitance available on the matrix.

For others Styles, voltages, tolerance and lead lengths see Skycap catalog or contact factory.

Others capacitance values available upon special request.

Others styles available: AR12, AR14, AR62, AR89.

X7R Dielectric



SIZE AND CAPACITANCE SPECIFICATIONS

EIA Characteristic

Dimensions: Millimeters (Inches)

EA Characteristic Dimensions. Millimeters (inches)												
AVX Style			15	AR	AR20		AR21		AR30		AR40	
AVX "Insertable"		AR	07	AR29		AR59		AR65		AR75		
Width		3.81 5.08		08	5.08		7.62		10.16			
(W)		(.150)		(.200)		(.200)		(.300)		(.400)		
	Height	3.81		5.08		5.08		7.62		10.16		
	(H)	(.150)			(.200)		00)	(.3)	00)	(.40	J0)	
	Thickness	2.5		3.175			75	3.81		3.81		
	(T)	(.10		(.12		<u> </u>	25)	(.1		(.15		
	Lead Spacing	2.5			54		80	5.0		5.0		
	(L.S.)	(.10		(.10		<u> </u>	00)	(.20		(.20		
	Lead Diameter	.50			08		08	.50		.50		
_	(L.D.)	(.02			20)	<u> </u>	20)	(.0:		(.02		
Cap.	Industry Preferred	WV		WV			DC	WV		WV		
in. pF	Values in Blue	100	50	100	50	100	50	100	50	100	50	
470	ARC471K4R											
1000	ARC102K4R											
1500	ARC152K4R											
2200	ARC222K4R											
3300	ARC332K4R											
4700	ARC472K4R											
6800	ARC682K4R											
10,000	ARC103K4R											
15,000	ARC153K4R											
22,000	ARC223K4R											
33,000	ARC333K4R											
47,000	ARC473K4R											
68,000	ARC683K4R ARC104K4R											
150,000	ARC104K4R							-				
150,000 220,000	ARC224K4R			\vdash		\vdash						
330,000	ARC334K4R			\vdash		\vdash						
390,000	ARC394K4R	-						\vdash				
470,000	ARC474K4R	\vdash		\vdash		\vdash						
680,000	ARC684K4R											
1.0 uF	ARC105K4R					-						
4,700,000	ARC475K4R			\vdash		\vdash						
6,800,000	ARC685K4R											
10.0 uF	ARC106K4R	 		<u> </u>		\vdash						
10.0 ur	AIXCIUUNAN					<u> </u>		l				

= Extended range with 0.150" thickness maximum

Notes:

"Insertable" make reference to alternative AVX style using the same range of capacitance available on the matrix.

For others Styles, voltages, tolerance and lead lengths see Skycap catalog or contact factory.

Others capacitance values available upon special request.

Others styles available: AR12, AR14, AR62, AR89, AR32, AR38.

X8R Dielectric "F"



GENERAL INFORMATION

AVX AR Series

Conformally Coated Radial Leaded MLC

Temperature Coefficients: COG (NPO), X7R, X8R

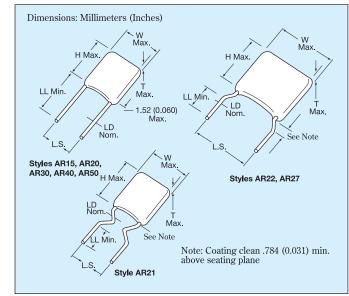
200, 100, 50 Volts

Case Material: Epoxy

Lead Material: Solderable

Qualified: to AEC-Q200

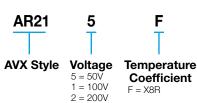
Temperature Range: up to 150°C

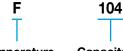


Drawings are for illustrative purposes only.

Actual lead form shape could vary within stated tolerances based on body size.







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.)



ce Capacitant by the part of the of didgit tional For Mo,000 didles \mathbb{R}^n in boint,



Capacitance
Tolerance
X8R:
J = ±5%

J = ±5%



ailure Rate Leads 4 = AEC-Q200 R = RoHS



Packaging

Blank: Bulk Packaging 1.0" minimum

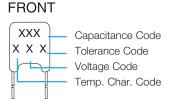
of lead length

T: Trimmed leads .230" ± .030" Bulk packaging TR1: Tape and Reel Packaging AP1: Ammopack packaging

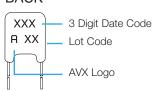
See packaging specification pages 33-34



MARKING



BACK



PACKAGING REQUIREMENTS

	Quantity per Bag
AR15, 20, 21, 30	1000 Pieces
AR40	500 Pieces

Note: AR15, AR20, AR21, AR30, and AR40 available on tape and reel per EIA specifications RS-468. See pages 33 and 34.

X8R Dielectric



SIZE AND CAPACITANCE SPECIFICATIONS

EIA CharacteristicDimensions: Millimeters (Inches)

AVX Style AR20 AR21									
	AR20			AR21					
	AR29			AR59					
	Width		5.08		5.08				
	(W)		(.200)			(.200)			
	Height		5.08			5.08			
	(H)		(.200)			(.200)			
	Thickness		3.175		3.175				
	(T)		(.125)		(.125)				
	Lead Spacing			2.54					
	(L.S.)	(.100)			(.200)				
	Lead Diameter		.508			.508			
	(L.D.)	(.020)			(.020)				
Cap.	Industry Preferred	WVDC			WVDC				
in. pF Values in Blue		200	100	50	200	100	50		
1,000 ARF102K4R									
10,000	ARF103K4R								
100,000	ARF104K4R								
330,000	ARF334K4R								

"Insertable" make reference to alternative AVX style using the same range of capacitance available on the matrix.

For others Styles, voltages, tolerance and lead lengths see Skycap catalog or contact factory. Others capacitance values available upon special request.

Others styles available: AR14, AR62, AR89.





STYLES AND CAPACITANCE SPECIFICATIONS

EIA Chacteristics

EIA CHACLEHSLICS										
AVX Style		AR15		AR20		AR21				
AVX	"Insertable"	AR07		AR29		AR59				
Cap. in pF	Industry Preferred	WVDC		WVDC		WVDC				
	Values	100	50	100	50	100	50			
470	ARL471K4R									
1,000	ARL102K4R									
1,500	ARL152K4R									
2,200	ARL222K4R									
3,300	ARL332K4R									
4,700	ARL472K4R									
6,800	ARL682K4R									
10,000	ARL103K4R									
15,000	ARL153K4R									
22,000	ARL223K4R									
33,000	ARL333K4R									
47,000	ARL473K4R									
68,000	ARL683K4R									
100,000	ARL104K4R									
150,000	ARL154K4R									
220,000	ARL224K4R									
330,000	ARL334K4R									
390,000	ARL394K4R									
470,000	ARL474K4R									
680,000	ARL684K4R									
1.0 uF	ARL105K4R									
4700,000	ARL475K4R									
6800,000	ARL685K4R									
10.0 uF	ARL106K4R									



High Voltage Automotive Product SkyCap Capacitors - X7R Dielectric

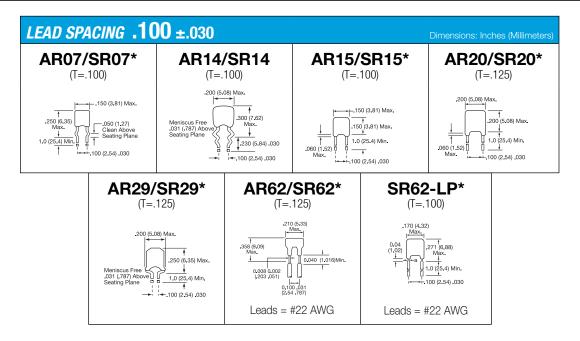
SIZE AND CAPACITANCE SPECIFICATIONS

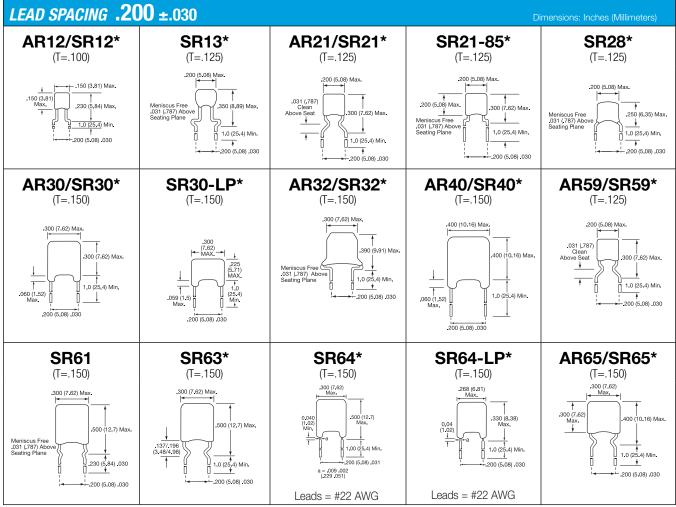
EIA CharacteristicDimensions: Millimeters (Inches)

	AVX Style	AR20	AR21	AR22	AR27	AR	30
	AVX "Insertable"	AR29	AR59	N/A	N/A	AR	65
Cap.	Industry Preferred	WVDC	WVDC	WVDC	WVDC	W۷	/DC
in. pF	Values in Blue	1000	1000	1000	1000	2000	3000
470	ARC471K4R						
1000	ARC102K4R						
1500	ARC152K4R						
2200	ARC222K4R						
3300	ARC332K4R						
4700	ARC472K4R						
6800	ARC682K4R						
10,000	ARC103K4R						
15,000	ARC153K4R						
22,000	ARC223K4R						
47,000	ARC473K4R						
68,000	ARC683K4R						

For others Styles, voltages, tolerance and lead lengths see Skycap catalog or contact factory.

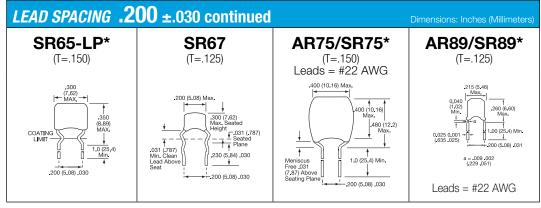


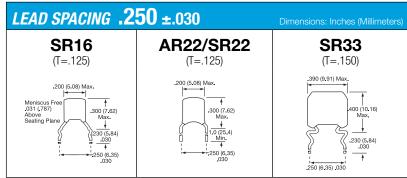


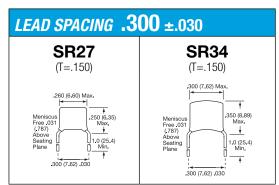


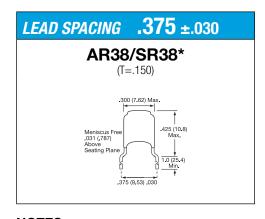
*SL style available in all SR configurations.

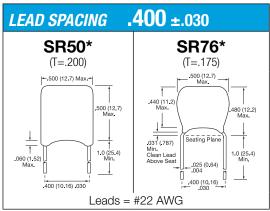












NOTES: 1. All leads are #24 AWG unless otherwise noted.

- 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.

Drawings are for illustrative purposes only.



The Important Information/Disclaimer is incorporated in these specifications

^{*}SL style available in all SR configurations.



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AR215F102K4R AR215F102K4RTR1 AR215F103K4R AR215F103K4RTR1 AR215F104K4R AR215F104K4RTR1 AR215A101K4R AR215C102K4R AR215A102K4R AR215C103K4R AR215C104K4R AR215C224K4R AR211C103K4R AR155C102K4R AR211C102K4R AR151C103K4R AR305C474K4R AR155A102K4R AR205A102K4R AR211A101K4R AR401C105K4R AR211C104K4R AR155C104K4R AR201C104K4R AR151C102K4R AR201A102K4R AR201C102K4R AR155C103K4R AR201C103K4R AR205C224K4R AR211A102K4R AR215F103K4RTR2 AR215F473K4R AR155A101K4R AR205F104K4R AR201C333K4RTR2 AR215F472K4RTR1 AR201C103K4RTR2 AR201C472K4RTR2 AR205F102K4RTR2 AR205F103K4RTR2 AR205F104K4RTR2 AR205F334K4R AR211A471J4R AR211A471J4RTR2 AR211C102K4RTR2 AR211C103K4RTR2 AR211C472K4RTR2 AR212A101J4RTR2 AR212A221J4R AR212A221J4RTR2 AR215A102J4R AR215A222J4R AR215A222J4RTR2 AR215A472J4RTR2 AR215C104K4RTR2 AR215F102K4RTR2 AR215F104K4RTR2 AR305C474K4RTR2 AR401C105K4RTR2 AR215F334K4R AR205F472K4R AR215F472K4R AR215C393K4R AR155A471K4RTR1 AR215F473K4RTR1 AR215A822K4RTR1 AR201A680K4RTR1 AR155A331K4RTR1 AR201A681K4RTR1 AR201C472K4RTR1 AR155A470K4RTR1 AR211C393K4RTR1 AR211A100K4RTR1 AR205A822K4RTR1 AR211C223K4R AR215A681K4RTR1 AR211C682K4RTR1 AR211A391K4R AR215C223K4R AR155A331K4R AR215A151K4RTR1 AR201C152K4RTR1 AR155A1R0D4R AR201A152K4RTR1 AR201A150K4RTR1 AR201A151K4RTR1 AR211C333K4RTR1 AR155A151K4RTR1 AR201C393K4R AR205C393K4R AR201C153K4RTR1 AR155A391K4R AR151C682K4RTR1 AR211C152K4RTR1 AR201C473K4RTR1 AR215A150K4RTR1 AR211C683K4RTR1 AR151C681K4RTR1 AR211C333K4R