Radial Leads/Ceralam®

GENERAL INFORMATION

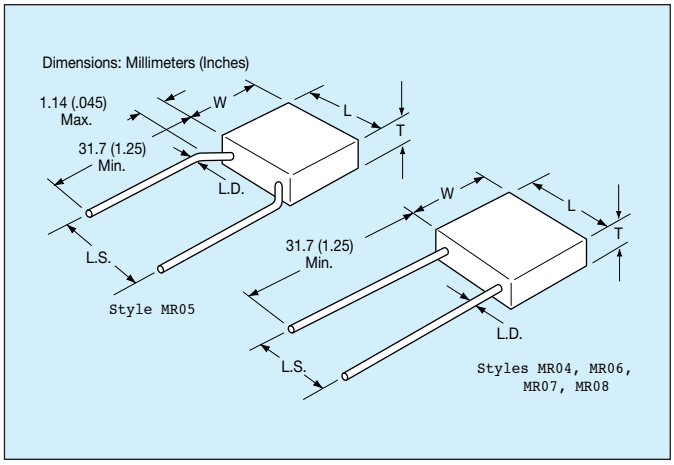
AVX MR Series

Molded Radial Leaded MLC

Temperature Coefficients: C0G (NP0), X7R, Z5U
50, 100, 200 Volts

Case Material: Molded Epoxy

Lead Material: Solderable



HOW TO ORDER

MR05	1	A	561	J	A	A
AVX Style	**Voltage**	**Dielectric**	**Capacitance**	**Capacitance Tolerance**	**Failure Rate**	**Leads**
MR04 MR05 MR06 MR07 MR08	5 = 50V 1 = 100V 2 = 200V	A = C0G (NP0) C = X7R E = Z5U	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.)	C0G (NP0): D = ±.5pF (>10pF only) 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%	A = Not Applicable T = CECC	A = Standard Solderable (SnPb) T[1] = Trimmed Leads .230" ± .030"

Not RoHS Compliant

[1] Trimmed lead length for the MR05 style will be measured from the bend in the lead (seating plane).

MARKING

Marking is as size permits.
(For code identification, see HOW TO ORDER section.)

— AVX
— Capacitance Tolerance
— Voltage Rating
— Temperature Coefficient
— Date Code
— Lot Code

PACKAGING REQUIREMENTS

Bulk Packaging: 1000 pcs. per sealed package except MR07/MR08 (300 pcs.).

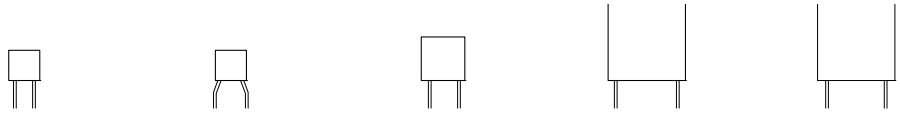
Tape and Reel: Available on MR04, MR05, and MR06 only (2500 pcs./reel).

Ammo Packaging: Available on special request.

Radial Leads/Ceralam®

C0G (NP0)

SIZE AND CAPACITANCE SPECIFICATIONS



Dimensions: Millimeters (Inches)

	AVX Style	MR04			MR05			MR06			MR07			MR08		
	Length*	4.83 (.190")			4.83 (.190")			7.36 (.290")			12.44 (.490")			12.44 (.490")		
	Width*	4.83 (.190")			4.83 (.190")			7.36 (.290")			12.44 (.490")			12.44 (.490")		
	Thickness*	2.28 (.090")			2.28 (.090")			2.28 (.090")			3.55 (.140")			6.09 (.240")		
	Lead Spacing*	2.54 (.100")			5.08 (.200")			5.08 (.200")			10.16 (.400")			10.16 (.400")		
	Lead Diameter*	.635 (.025")			.635 (.025")			.635 (.025")			.635 (.025")			.635 (.025")		
Cap. in pF	Typical AVX Part Nos.	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50
1.0 to 9.1	MR-----5A1R0DAA MR-----5A9R1DAA															
10	MR-----5A100KAA															
12	MR-----5A120KAA															
15	MR-----5A150KAA															
18	MR-----5A180KAA															
22	MR-----5A220KAA															
27	MR-----5A270KAA															
33	MR-----5A330KAA															
39	MR-----5A390KAA															
47	MR-----5A470KAA															
56	MR-----5A560KAA															
68	MR-----5A680KAA															
82	MR-----5A820KAA															
100	MR-----5A101KAA															
120	MR-----5A121KAA															
150	MR-----5A151KAA															
180	MR-----5A181KAA															
220	MR-----5A221KAA															
270	MR-----5A271KAA															
330	MR-----5A331KAA															
390	MR-----5A391KAA															
470	MR-----5A471KAA															
560	MR-----5A561KAA															
680	MR-----5A681KAA															
820	MR-----5A821KAA															
1000	**MR-----5A102KAA**															
1200	MR-----5A122KAA															
1500	MR-----5A152KAA															
1800	MR-----5A182KAA															
2200	MR-----5A222KAA															
2700	MR-----5A272KAA															
3300	MR-----5A332KAA															
3900	MR-----5A392KAA															
4700	MR-----5A472KAA															
5600	MR-----5A562KAA															
6800	MR-----5A682KAA															
8200	MR-----5A822KAA															
10,000	**MR-----5A103KAA**															
12,000	MR-----5A123KAA															
15,000	MR-----5A153KAA															
18,000	MR-----5A183KAA															
22,000	MR-----5A223KAA															
27,000	MR-----5A273KAA															
33,000	MR-----5A333KAA															
39,000	MR-----5A393KAA															
47,000	MR-----5A473KAA															
56,000	MR-----5A563KAA															
68,000	MR-----5A683KAA															
82,000	MR-----5A823KAA															
100,000	**MR-----5A104KAA**															
120,000	MR-----5A124KAA															
150,000	MR-----5A154KAA															

For trimmed leads see "How To Order".
For other tolerances see "How To Order".
For other voltages see "How To Order".

= Industry preferred values

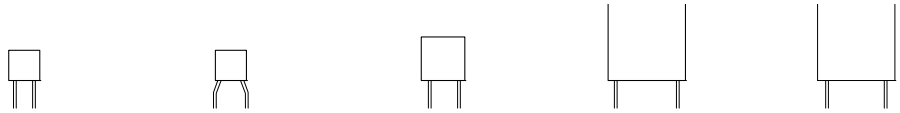
*Length, width and thickness dimensions are ±.254 mm (±.010"). Lead diameter is ±.05 mm (±.002"). Lead spacing is ±.381 mm (±.015").

Radial Leads/Ceralam®

X7R

SIZE AND CAPACITANCE SPECIFICATIONS

Dimensions: Millimeters (Inches)



	AVX Style	MR04			MR05			MR06			MR07			MR08		
	Length*	4.83 (.190")			4.83 (.190")			7.36 (.290")			12.44 (.490")			12.44 (.490")		
	Width*	4.83 (.190")			4.83 (.190")			7.36 (.290")			12.44 (.490")			12.44 (.490")		
	Thickness*	2.28 (.090")			2.28 (.090")			2.28 (.090")			3.55 (.140")			6.09 (.240")		
	Lead Spacing*	2.54 (.100")			5.08 (.200")			5.08 (.200")			10.16 (.400")			10.16 (.400")		
	Lead Diameter*	.635 (.025")			.635 (.025")			.635 (.025")			.635 (.025")			.635 (.025")		
Cap. in pF	Typical AVX Part Nos.	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50	WVDC 200	100	50
100	MR____5C101KAA															
120	MR____5C121KAA															
150	MR____5C151KAA															
180	MR____5C181KAA															
220	MR____5C221KAA															
270	MR____5C271KAA															
330	MR____5C331KAA															
390	MR____5C391KAA															
470	MR____5C471KAA															
560	MR-----5C561KAA															
680	MR-----5C681KAA															
820	MR-----5C821KAA															
1000	**MR____5C102KAA**															
1200	MR____5C122KAA															
1500	MR____5C152KAA															
1800	MR____5C182KAA															
2200	MR____5C222KAA															
2700	MR____5C272KAA															
3300	MR____5C332KAA															
3900	MR____5C392KAA															
4700	MR____5C472KAA															
5600	MR____5C562KAA															
6800	MR____5C682KAA															
8200	MR____5C822KAA															
10,000	**MR____5C103KAA**															
12,000	MR____5C123KAA															
15,000	MR____5C153KAA															
18,000	MR____5C183KAA															
22,000	MR____5C223KAA															
27,000	MR____5C273KAA															
33,000	MR____5C333KAA															
39,000	MR____5C393KAA															
47,000	MR____5C473KAA															
56,000	MR____5C563KAA															
68,000	MR____5C683KAA															
82,000	MR____5C823KAA															
100,000	**MR____5C104KAA**															
120,000	MR____5C124KAA															
150,000	MR____5C154KAA															
180,000	MR____5C184KAA															
220,000	MR____5C224KAA															
270,000	MR____5C274KAA															
330,000	MR____5C334KAA															
390,000	MR____5C394KAA															
470,000	MR____5C474KAA															
560,000	MR____5C564KAA															
680,000	MR____5C684KAA															
820,000	MR____5C824KAA															
1.0 µF	**MR____5C105KAA**															
1.2 µF	MR____5C125KAA															
1.5 µF	MR____5C155KAA															
1.8 µF	MR____5C185KAA															
2.0 µF	MR____5C205KAA															
2.2 µF	MR____5C225KAA															
2.7 µF	MR____5C275KAA															
3.3 µF	MR____5C335KAA															
3.9 µF	MR____5C395KAA															
4.7 µF	**MR____5C475KAA**															

For trimmed leads see "How To Order".
For other tolerances see "How To Order".
For other voltages see "How To Order".

= Industry preferred values

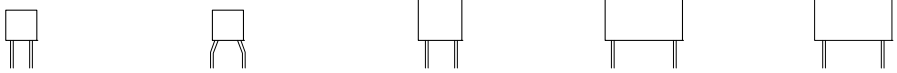
*Length, width and thickness dimensions are ±.254 mm (±.010"). Lead diameter is ±.05 mm (±.002"). Lead spacing is ±.381 mm (±.015").

Radial Leads/Ceralam®

Z5U

SIZE AND CAPACITANCE SPECIFICATIONS

Dimensions: Millimeters (Inches)



	AVX Style	MR04	MR05	MR06	MR07	MR08
	Length*	4.83 (.190")	4.83 (.190")	7.36 (.290")	12.44 (.490")	12.44 (.490")
	Width*	4.83 (.190")	4.83 (.190")	7.36 (.290")	12.44 (.490")	12.44 (.490")
	Thickness*	2.28 (.090")	2.28 (.090")	2.28 (.090")	3.55 (.140")	6.09 (.240")
	Lead* Spacing	2.54 (.100")	5.08 (.200")	5.08 (.200")	10.16 (.400")	10.16 (.400")
	Lead* Diameter	.635 (.025")	.635 (.025")	.635 (.025")	.635 (.025")	.635 (.025")
Cap. in pF	Typical AVX Part Nos.	WVDC 100 / 50	WVDC 100 / 50	WVDC 100 / 50	WVDC 100 / 50	WVDC 100 / 50
10,000	**MR____5E103ZAA**					
12,000	MR____5E123ZAA					
15,000	MR____5E153ZAA					
18,000	MR____5E183ZAA					
22,000	MR____5E223ZAA					
27,000	MR____5E273ZAA					
33,000	MR____5E333ZAA					
39,000	MR____5E393ZAA					
47,000	MR____5E473ZAA					
56,000	MR____5E563ZAA					
68,000	MR____5E683ZAA					
82,000	MR____5E823ZAA					
100,000	**MR____5E104ZAA**					
120,000	MR____5E124ZAA					
150,000	MR____5E154ZAA					
180,000	MR____5E184ZAA					
220,000	MR____5E224ZAA					
270,000	MR____5E274ZAA					
330,000	MR____5E334ZAA					
390,000	MR____5E394ZAA					
470,000	**MR____5E474ZAA**					
560,000	MR____5E564ZAA					
680,000	MR____5E684ZAA					
820,000	MR____5E824ZAA					
1.0 µF	**MR____5E105ZAA**					
1.2 µF	MR____5E125ZAA					
1.5 µF	MR____5E155ZAA					
1.8 µF	MR____5E185ZAA					
2.2 µF	MR____5E225ZAA					
2.7 µF	MR____5E275ZAA					
3.3 µF	MR____5E335ZAA					
3.9 µF	MR____5E395ZAA					
4.7 µF	**MR____5E475ZAA**					
5.6 µF	MR____5E565ZAA					
6.8 µF	MR____5E685ZAA					
8.2 µF	MR____5E825ZAA					
10.0 µF	**MR____5E106ZAA**					

For trimmed leads see "How To Order".
For other tolerances see "How To Order".
For other voltages see "How To Order".

= Industry preferred values

*Length, width and thickness dimensions are ±.254 mm (±.010"). Lead diameter is ±.05 mm (±.002"). Lead spacing is ±.381 mm (±.015).

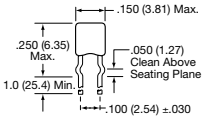
SkyCap®

Configurations by Lead Spacing

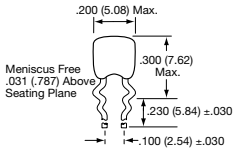
LEAD SPACING .100 ±.030

Dimensions: Inches (Millimeters)

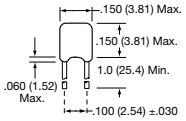
AR07/SR07* (T=.100)



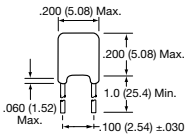
AR14/SR14 (T=.100)



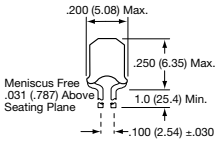
AR15/SR15* (T=.100)



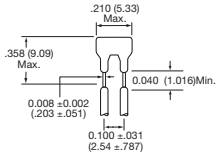
AR20/SR20* (T=.125)



AR29/SR29* (T=.125)

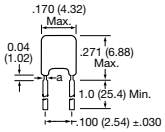


AR62/SR62* (T=.125)



Leads = #22 AWG

SR62-LP* (T=.100)

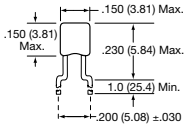


Leads = #22 AWG

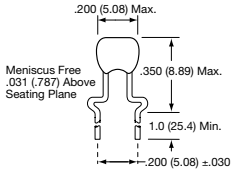
LEAD SPACING .200 ±.030

Dimensions: Inches (Millimeters)

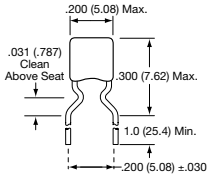
AR12/SR12* (T=.100)



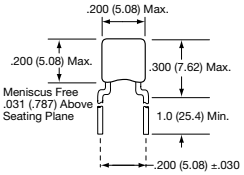
SR13* (T=.125)



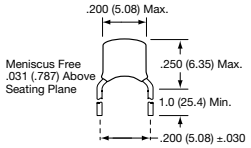
AR21/SR21* (T=.125)



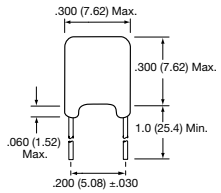
SR21-85* (T=.125)



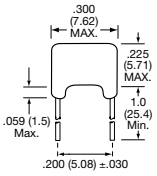
SR28* (T=.125)



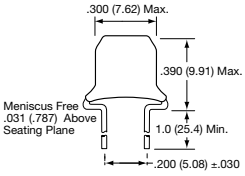
AR30/SR30* (T=.150)



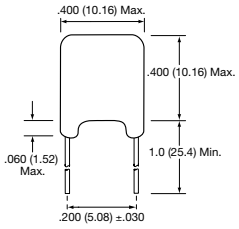
SR30-LP* (T=.150)



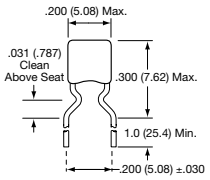
AR32/SR32* (T=.150)



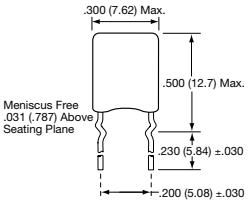
AR40/SR40* (T=.150)



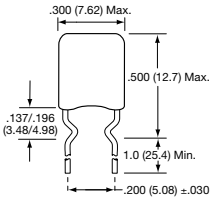
AR59/SR59* (T=.125)



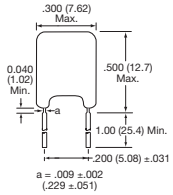
SR61 (T=.150)



SR63* (T=.150)

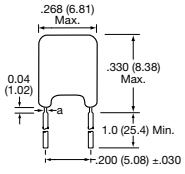


SR64* (T=.150)



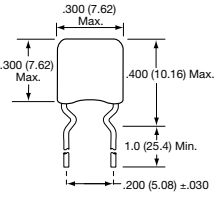
Leads = #22 AWG

SR64-LP* (T=.150)



Leads = #22 AWG

AR65/SR65* (T=.150)



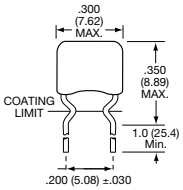
*SL style available in all SR configurations.

Configurations by Lead Spacing

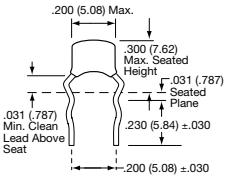
LEAD SPACING .200 ±.030 continued

Dimensions: Inches (Millimeters)

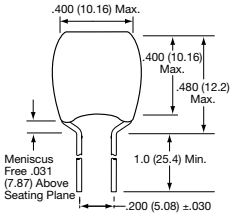
SR65-LP*
(T=.150)



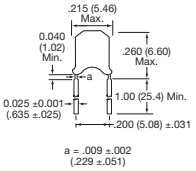
SR67
(T=.125)



AR75/SR75*
(T=.150)
Leads = #22 AWG



AR89/SR89*
(T=.125)

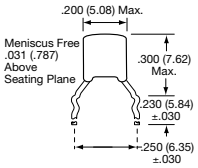


Leads = #22 AWG

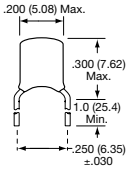
LEAD SPACING .250 ±.030

Dimensions: Inches (Millimeters)

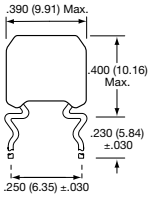
SR16
(T=.125)



AR22/SR22
(T=.125)

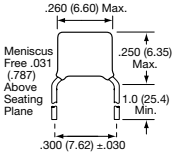


SR33
(T=.150)

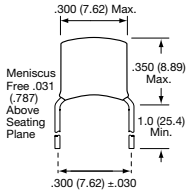


LEAD SPACING .300 ±.030

SR27
(T=.150)

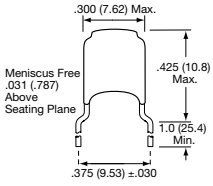


SR34
(T=.150)



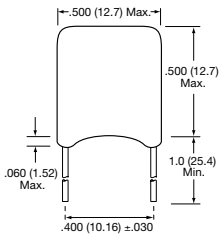
LEAD SPACING .375 ±.030

AR38/SR38*
(T=.150)

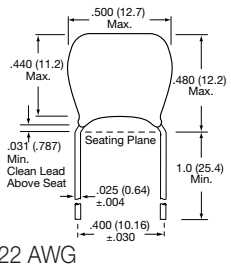


LEAD SPACING .400 ±.030

SR50*
(T=.200)



SR76*
(T=.175)



Leads = #22 AWG

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.

*SL style available in all SR configurations.

Drawings are for illustrative purposes only.
Actual lead form shape could vary within stated tolerances based on body size.