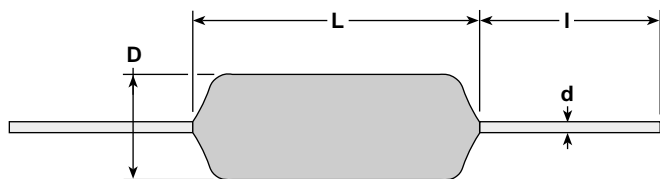


features

- Conformal coated axial MLC's
- NPO, X7R, Z5U temperature coefficients
- Epoxy construction with UL492 flame retardant coating
- Marking: Orange-brown body color with black marking
- Products with lead-free terminations meet RoHS requirements

dimensions and construction



Type	Dimensions inches (mm)			
	L (max.)	D (max.)	d	I (min.)
ACB	.170 (4.32)	.100 (2.54)	.019±.002 (.483±.05)	1.00 (25.4)
ACC		.120 (3.05)		
ACD	.260 (6.60)	.100 (2.54)		
ACE	.290 (7.37)	.150 (3.81)		
ACF	.400 (10.16)			

capacitors

ordering information

New Part #	AC	B	NPO	H	T	R	102	M
	Type	Style	Dielectric	Voltage	Termination Material	Packaging	Capacitance	Tolerance
		B C D E F	NPO X7R Z5U	H: 50V I: 100V J: 200V	T: Sn	No Designation: Bulk R: Leaded Reel	2 significant figures + 1 multiplier "R" indicates decimal on value <10pF	C: ±0.25pF D: ±0.5pF J: ±5% K: ±10% M: ±20% Z: +80, -20%

For further information on packaging, please refer to Appendix C.

applications and ratings

Dielectric	Capacitance Range	Voltage Ratings*	Tolerance	T.C.C.	Operating Temperature Range
NPO	1.0pF - 12,000pF	50V	±0.25pF, ±0.5pF, ±5%, ±10%	0 ± 30 ppm/°C	-55°C to +125°C
X7R	220pF - 470,000pF	100V	±5%, ±10%, ±20%	±15	
Z5U	1.0pF - 150,000pF	200V	±20%, +80,-20%	+22%, -56%	

* Reference capacitance range charts for available voltage ratings.

NPO dielectric

Size		ACB			ACD		ACE		ACF		
Capacitance values (pF)	Code	WVDC	50 (H)	100 (I)	200 (J)	50 (H)	100 (I)	50 (H)	100 (I)	50 (H)	100 (I)
1.0 - 9.9*	1R0 - 9R9PF										
10	100PF										
12	120PF										
15	150PF										
18	180PF										
22	220PF										
27	270PF										
33	330PF										
39	390PF										
47	470PF										
56	560PF										
68	680PF										
82	820PF										
100	.0001 101PF										
120	.00012 121PF										
150	.00015 151PF										
180	.00018 181PF										
220	.00022 221PF										
270	.00027 271PF										
330	.00033 331PF										
390	.00039 391PF										
470	.00047 471PF										
560	.00056 561PF										
680	.00068 681PF										
820	.00082 821PF										
1000	.0010 102PF										
1200	.0012 122PF										
1500	.0015 152PF										
1800	.0018 182PF										
2200	.0022 222PF										
2700	.0027 272PF										
3300	.0033 332PF										
3900	.0039 392PF										
4700	.0047 472PF										
5600	.0056 562PF										
6800	.0068 682PF										
8200	.0082 822PF										
10000	.010 103PF										
12000	.012 123PF										

* C: ±0.25pF & D: ±0.5pF tolerance only

X7R dielectric

Size				ACB			ACC	ACD		ACE		ACF
Capacitance values (pF)	Capacitance values (µF)	Code	WVDC	50 (H)	100 (I)	200 (J)	50 (H)	50 (H)	100 (I)	50 (H)	100 (I)	50 (H)
220	.00022	221PF										
270	.00027	271PF										
330	.00033	331PF										
390	.00039	391PF										
470	.00047	471PF										
560	.00056	561PF										
680	.00068	681PF										
820	.00082	821PF										
1000	.0010	102PF										
1200	.0012	122PF										
1500	.0015	152PF										
1800	.0018	182PF										
2200	.0022	222PF										
2700	.0027	272PF										
3300	.0033	332PF										
3900	.0039	392PF										
4700	.0047	472PF										
5600	.0056	562PF										
6800	.0068	682PF										
8200	.0082	822PF										
10000	.010	103PF										
12000	.012	123PF										
15000	.015	153PF										
18000	.018	183PF										
22000	.022	223PF										
27000	.027	273PF										
33000	.033	333PF										
39000	.039	393PF										
47000	.047	473PF										
56000	.056	563PF										
68000	.068	683PF										
82000	.082	823PF										
100000	.100	104PF										
120000	.120	124PF										
150000	.150	154PF										
180000	.180	184PF										
220000	.220	224PF										
270000	.270	274PF										
330000	.330	334PF										
390000	.390	394PF										
470000	.470	474PF										

Z5U dielectric

Size				ACB		ACC		ACD		ACE	
Capacitance values (pF)	μF	Code	WVDC	50 (H)	100 (I)	50 (H)	100 (I)	50 (H)	100 (I)	50 (H)	100 (I)
10000	.010	103PF									
12000	.012	123PF									
15000	.015	153PF									
18000	.018	183PF									
22000	.022	223PF									
27000	.027	273PF									
33000	.033	333PF									
39000	.039	393PF									
47000	.047	473PF									
56000	.056	563PF									
68000	.068	683PF									
82000	.082	823PF									
100000	.100	104PF									
120000	.120	124PF									
150000	.150	154PF									
180000	.180	184PF									
220000	.220	224PF									
270000	.270	274PF									
330000	.330	334PF									
390000	.390	394PF									
470000	.470	474PF									
560000	.560	564PF									
680000	.680	684PF									
1000000	1.0	105PF									