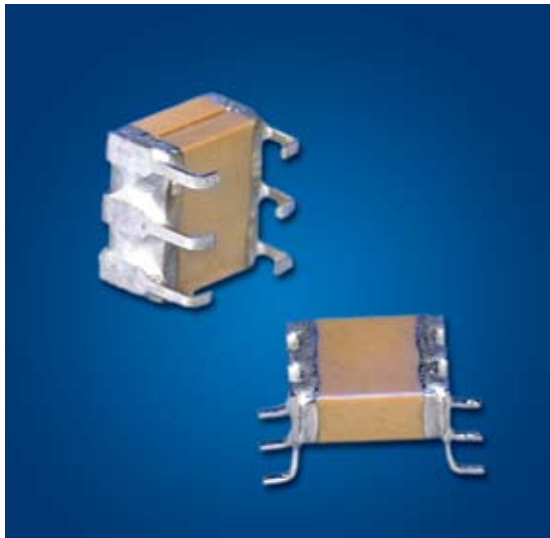


MINI-SWITCH MODE® CAPACITORS



AMC's Mini-Switch Mode® ceramic capacitors combine the advantages of high capacitance found in tantalum capacitors with very low ESR performance of ceramic capacitors. The "J" and "L" lead configurations replace 1825 and 2225 SMT chips to provide stress relief and prevent cracking due to thermal cycling or mechanical board flexing. Another plus of the J-lead style is that this configuration allows use of the same solder lands as the SMT chips. See the Switch-Mode section for larger values. See also the Technical Notes on soldering and handling and suggested solder lands.

KEY FEATURES

- Stress Relief from Cracking due to Thermal Cycling, TCE Mis-matches or Board Flexing
- 25 to 500 VDC Ratings
- Custom Sizes, Voltages, and Values Available
- Ideal for DC-DC Power Supply Applications

CAPACITANCE SELECTION

SIZE CODE	EIA CHIP SIZE	NPO Max Capacitance (uF)					X7R Max Capacitance (uF)				
		25V	50V	100V	200V	500V	25V	50V	100V	200V	500V
P09	1825	0.056	0.047	0.039	0.027	0.018	1.5	1.2	0.75	0.56	0.27
P29	1825	0.11	0.094	0.078	0.054	0.036	3.0	2.4	1.5	1.1	0.54
P39	1825	0.16	0.14	0.11	0.081	0.054	4.5	3.6	2.2	1.6	0.81
P49	1825	0.22	0.18	0.15	0.10	0.07	6.0	4.8	3.0	2.2	1.0
P08	2225	0.068	0.056	0.047	0.033	0.027	2.7	2.2	1.5	1.2	0.39
P28	2225	0.13	0.11	0.094	0.066	0.054	5.4	4.4	3.0	2.4	0.78
P38	2225	0.20	0.16	0.14	0.10	0.081	8.1	6.6	4.5	3.6	1.1
P48	2225	0.27	0.22	0.18	0.13	0.10	10	8.8	6.0	4.8	1.5



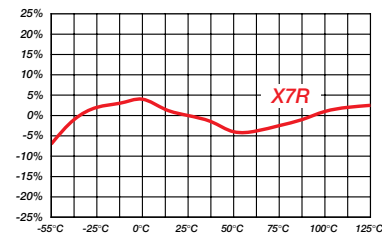
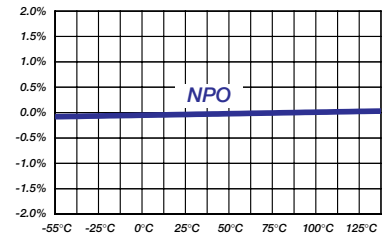
MECHANICAL CHARACTERISTICS

Dimensions Applicable to all sizes:																		
	In.	mm																
h ± .010	.070	1.78																
c Typ.	.100	2.54																
p ± .015	.065	1.65																
Dimensions Applicable to specific sizes:			P08		P09		P28		P29		P38		P39		P48		P49	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
L max	.280	7.11	.240	6.10	.280	7.11	.240	6.10	.280	7.11	.240	6.10	.280	7.11	.240	6.10	.280	7.11
W max	.270	6.86	.270	6.86	.270	6.86	.270	6.86	.270	6.86	.270	6.86	.270	6.86	.270	6.86	.270	6.86
T max	.095	2.41	.095	2.41	.190	4.83	.190	4.83	.285	7.24	.285	7.24	.380	9.65	.380	9.65	.380	9.65

Note: J-Lead and L-Lead options are available on all sizes above

ELECTRICAL CHARACTERISTICS

		X7R	NPO
TEMPERATURE COEFFICIENT	-55 TO 125°C	0 ± 15%	0 ± 30ppm/°C
DISSIPATION FACTOR	1kHz, 25°C	2.5% max	0.1% max
AGING	% per decade hour	2.5%	None
INSULATION RESISTANCE	1000 F or 100G, whichever is less at rated WVDC, 25°C		
DIELECTRIC STRENGTH	FOR 500V RATINGS	750VDC, 25°C, 50mA max	
	FOR 200V RATINGS	2xWVDC, 25°C, 50mA max	
	FOR 25-100V RATINGS	2.5xWVDC, 25°C, 50mA max	
CAP & D.F. MEASUREMENTS	1kHz ± 50Hz, 1.0±0.2Vrms, 25°C		



HOW TO ORDER - MINI-SWITCH MODE®

500

VOLTAGE
Standard Voltages:
250 = 25 V
500 = 50 V
101 = 100 V
201 = 200 V
501 = 500 V

P28

CASE SIZE
See Table

W

DIELECTRIC
N = NPO
W = X7R

395

CAPACITANCE
1st two digits are significant; third digit denotes number of zeros.

103 = 0.01 µF
105 = 1.0 µF
106 = 10 µF

K

TOLERANCE
J = ± 5%
K = ± 10%
M = ± 20%
Z = +80% -20%

J

LEAD STYLE
J = "J" Leads (formed in)
L = "L" Leads (formed out)

4

MARKING
3 = Specified
4 = Unmarked

U

SPECIAL CODE
Code Type Reel
U Embossed 13" 16mm tape
None Bulk Packaged
AMC tape specifications conform to EIA-481.

Part number written: 500P28W395KJ4U