

Metallised polyester miniature
C280AE Series 250V d.c. working

Type No.	Capacitance μF	Dimensions mm						Colour Code*		
		P	L	T	H	d	ℓ	Band 1	Band 2	Band 3
C280AE/PI0K	0.01	10.2	12.5	4	9	0.6	16	Brown	Black	Orange
C280AE/PI5K	0.015	10.2	12.5	4	9	0.6	16	Brown	Green	Orange
C280AE/P22K	0.022	10.2	12.5	4	9	0.6	16	Red	Red	Orange
C280AE/P33K	0.033	10.2	12.5	4	9	0.6	16	Orange	Orange	Orange
C280AE/P47K	0.047	10.2	12.5	4	9	0.6	16	Yellow	Violet	Orange
C280AE/P68K	0.068	10.2	12.5	5	10	0.6	16	Blue	Grey	Orange
C280AE/PI00K	0.1	10.2	12.5	6	11	0.6	16	Brown	Black	Yellow
C280AE/PI50K	0.15	15.3	17.5	6	11	0.8	25	Brown	Green	Yellow
C280AE/P220K	0.22	15.3	17.5	7	12	0.8	25	Red	Red	Yellow
C280AE/A330K	0.33	20.3	22.5	6.5	11.5	0.8	21	Orange	Orange	Yellow
C280AE/A470K	0.47	20.3	22.5	7.5	12.5	0.8	21	Yellow	Violet	Yellow
C280AE/A680K	0.68	20.3	22.5	9.5	14.5	0.8	21	Blue	Grey	Yellow
C280AE/AIM	1	27.9	30	9.5	14.5	0.8	21	Brown	Black	Green
C280AE/AIM5	1.5	27.9	30	10.5	18	0.8	21	Brown	Green	Green
C280AE/A2M2	2.2	27.9	30	12.5	20.5	0.8	21	Red	Red	Green

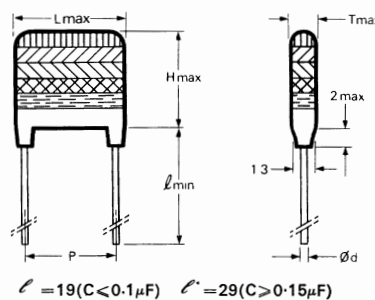
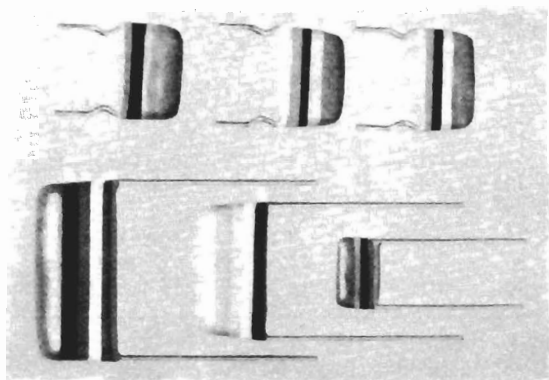
* Colour Code reads from the top of the component. Two further bands denote tolerance and working voltage.

Losses (at 1kHz) C280AE Series $\tan \delta \leq 75 \times 10^{-4}$

Capacitance Tolerance for $C \leq 0.22 \mu\text{F} \pm 20\%$
for $C \geq 0.33 \mu\text{F} \pm 10\%$

Insulation Resistance at 20 °C for $C \leq 0.33 \mu\text{F}$

$R \geq 30\,000\text{M}\Omega$
Temperature Range -40 to +85 °C


Metallised polyester
344 2 Series 100V d.c. working

Type No. Polyester	Capacitance μF	Dimensions mm*			
		P	L	T	H
344 25473	0.047	10	13	4.5	10
344 25683	0.068	10	13	4.5	10
344 25104	0.1	10	13	4.5	10
344 25154	0.15	10	13	4.5	10
344 25224	0.22	10	13	5	11

*Outline drawing on next page

Metalised film capacitors p.e.t.p.
C280AE (342) Series 250V d.c. working

Type No.	Code No.	Capacitance		Dimensions mm						Colour code†		
		μF	S	L	T	H	d	ϕ	Band 1	Band 2	Band 3	
C280AE/P10K	342 44103	0.01	10.2	12.5	4	9	0.6	16	Brown	Black	Orange	
C280AE/P15K	342 44153	0.015	10.2	12.5	4	9	0.6	16	Brown	Green	Orange	
C280AE/P22K	342 44223	0.022	10.2	12.5	4	9	0.6	16	Red	Red	Orange	
C280AE/P33K	342 44333	0.033	10.2	12.5	4	9	0.6	16	Orange	Orange	Orange	
C280AE/P47K	342 44473	0.047	10.2	12.5	4	9	0.6	16	Yellow	Violet	Orange	
C280AE/P68K	342 44683	0.068	10.2	12.5	4	9	0.6	16	Blue	Grey	Orange	
C280AE/P100K	342 44104	0.1	10.2	12.5	5	9	0.6	16	Brown	Black	Yellow	
C280AE/P150K	342 44154	0.15	15.3	17.5	5	10	0.8	18	Brown	Green	Yellow	
C280AE/P220K	342 44224	0.22	15.3	17.5	6	11	0.8	18	Red	Red	Yellow	
C280AE/A330K	342 45334	0.33	20.3	22.5	6	11	0.8	21	Orange	Orange	Yellow	
C280AE/A470K	342 45474	0.47	20.3	22.5	7	12	0.8	21	Yellow	Violet	Yellow	
C280AE/A680K	342 45684	0.68	20.3	22.5	8.5	13.5	0.8	21	Blue	Grey	Yellow	
C280AE/A1M	342 45105	1	27.9	30	8.5	13.5	0.8	21	Brown	Black	Green	
C280AE/A1M5	342 45155	1.5	27.9	30	9	17	0.8	21	Brown	Green	Green	
C280AE/A2M2	342 45225	2.2	27.9	30	11	19	0.8	21	Red	Red	Green	

Polyester extended foil
C296AA Series 160V d.c. working

Type No.	Capacitance μF	Dimensions mm	
		D	L
C296AA/A10K	0.01	7.5	21
C296AA/A15K	0.015	7.5	21
C296AA/A22K	0.022	7.5	21
C296AA/A33K	0.033	7.5	21
C296AA/A47K	0.047	8	21
C296AA/A68K	0.068	9	21
C296AA/A100K	0.1	10.5	21
C296AA/A150K	0.15	12	21
C296AA/A220K	0.22	10	35
C296AA/A330K	0.33	12	35
C296AA/A470K	0.47	14	35
C296AA/A680K	0.68	16	35
C296AA/A1M	1	18.5	35

C296AC Series 400V d.c. working

Type No.	Capacitance μF	Dimensions mm	
		D	L
C296AC/A1K	0.001	7.5	21
C296AC/A1K5	0.0015	7.5	21
C296AC/A2K2	0.0022	7.5	21
C296AC/A3K3	0.0033	7.5	21
C296AC/A4K7	0.0047	7.5	21
C296AC/A6K8	0.0068	7.5	21
C296AC/A10K	0.01	7.5	21
C296AC/A15K	0.015	7.5	21
C296AC/A22K	0.022	8.5	21
C296AC/A33K	0.033	10	21
C296AC/A47K	0.047	11.5	21
C296AC/A68K	0.068	9.5	35
C296AC/A100K	0.1	11	35
C296AC/A150K	0.15	12.5	35
C296AC/A220K	0.22	14.5	35
C296AC/A330K	0.33	17	35
C296AC/A470K	0.47	19.5	35

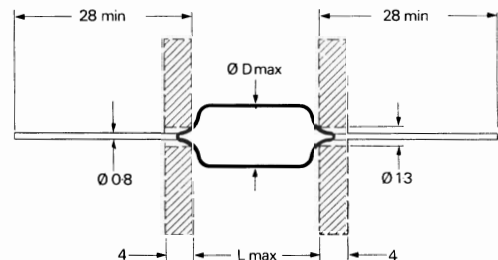
Capacitance Tolerance

Losses (at 1kHz)

Insulation Resistance at 20 °C

 $\pm 10\%$
 $\tan \delta \leq 60 \times 10^{-4}$
 for $C \leq 0.22 \mu\text{F}$,
 $R \geq 50\,000 \text{M}\Omega$
 for $C \geq 0.33 \mu\text{F}$,
 $RC \geq 16\,500 \text{M}\Omega \mu\text{F}$
 -40 to +85 °C

Temperature Range



Metallised polyester (cont.)
344 2 Series 100V d.c. working

Type No. Polyester	Capacitance μF	Dimensions mm			
		P	L	T	H
344 25334	0.33	15	17.5	5	11
344 25474	0.47	15	17.5	6	11.5
344 25684	0.68	15	17.5	7	13
344 25105	1	15	17.5	8.5	14.5
344 25155	1.5	22.5	26	7.5	16.5
344 25225	2.2	22.5	26	8.5	18
344 25335	3.3	22.5	26	9.5	19
344 25475	4.7	27.5	30	11	19.5
344 25685	6.8	27.5	30	13.5	22.5

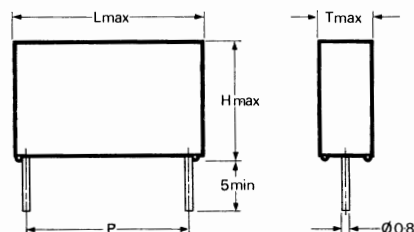
Metallised polyester
344 4 Series 250V d.c. working

Type No.	Capacitance μF	Dimensions mm			
		P	L	T	H
344 41103	0.01	10	13	4.5	10
344 41153	0.015	10	13	4.5	10
344 41223	0.022	10	13	4.5	10
344 41333	0.033	10	13	4.5	10
344 41473	0.047	10	13	4.5	10
344 41683	0.068	10	13	5	11
344 41104	0.1	15	17.5	5	11
344 41154	0.15	15	17.5	6	11.5
344 41224	0.22	15	17.5	7	13
344 41334	0.33	15	17.5	8.5	14.5
344 41474	0.47	22.5	26	6.5	15.5
344 41684	0.68	22.5	26	7.5	16.5
344 41105	1	22.5	26	9.5	19
344 41155	1.5	27.5	30	11	19.5
344 41225	2.2	27.5	30	13.5	22.5

Capacitance Tolerance $\pm 10\%$
 Temperature Range -55 to $+85$ °C

Losses (at 1kHz)
 Insulation Resistance

$\tan \delta \leq 75 \times 10^{-4}$
 $C \leq 0.33 \mu\text{F}$, $R \geq 30\,000 \text{M}\Omega$
 $\geq 0.47 \mu\text{F}$, $RC \geq 10\,000 \Omega\text{F}$



The 334 2 and 344 4 Series have Post Office approval and are RRE recommended

Miniature ceramic plate
C333 Series 63V d.c. working

Type No.	Capacitance pF	Capacitance Code Marking	Temperature Coefficient of Capacitance (nom.) pF per pF/deg C	Case Size
C333CB/N1E8	1.8	W or 1p8	0	1
C333CB/N2E2	2.2	X or 2p2	0	1
C333CB/N2E7	2.7	Y or 2p7	0	1
C333CB/N3E3	3.3	Z or 3p3	0	1
C333CB/N3E9	3.9	A or 3p9	0	1
C333CB/N4E7	4.7	B or 4p7	0	1
C333CB/N5E6	5.6	C or 5p6	0	1
C333CB/N6E8	6.8	D or 6p8	0	1
C333CB/N8E2	8.2	E or 8p2	0	1
C333CB/N10E	10	F or 10p	0	1
C333CB/C12E	12	G or 12p	0	1
C333CB/C15E	15	H or 15p	0	1
C333CB/C18E	18	J or 18p	0	1
C333CC/C22E	22	K or 22p	-150×10^{-6}	1
C333CC/C27E	27	L or 27p	-150×10^{-6}	2
C333CC/C33E	33	M or 33p	-150×10^{-6}	2
C333CC/C39E	39	39 or 39p	-150×10^{-6}	2
C333CC/C47E	47	47 or 47p	-150×10^{-6}	2
C333CC/C56E	56	56 or 56p	-150×10^{-6}	3
C333CC/C68E	68	68 or 68p	-150×10^{-6}	3
C333CC/C82E	82	82 or 82p	-150×10^{-6}	4
C333CC/C100E	100	100 or n10	-150×10^{-6}	4
C333CC/C120E	120	120 or n12	-150×10^{-6}	5
C333CC/C150E	150	150 or n15	-150×10^{-6}	5
C333CH/C180E	180	180 or n18	-750×10^{-6}	4
C333CH/C220E	220	220 or n22	-750×10^{-6}	4
C333CH/C270E	270	270 or n27	-750×10^{-6}	5
C333CH/C330E	330	330 or n33	-750×10^{-6}	5

Insulation Resistance (min) > 1000M Ω
 Temperature Range -55 to +85 °C
 Capacitance Tolerance 1.8 to 8.2 pF ± 0.25 pF
 10 to 330 pF $\pm 2\%$

Dimensions mm

Case Size	L max	H max
1	3.5	4.5
2	4.5	5.5
3	5.5	6.5
4	6.5	7.5
5	6.5	10.5

