

Miniature ceramic plate capacitors

Class 2, 63 V and 100 V (DC) (non-flanged types)

FEATURES

- General purpose
- Coupling and decoupling
- Space saving.

APPLICATIONS

Ceramic plate capacitors without flange are not for new design projects. They are recommended for maintenance purposes only. The electrical properties are identical to capacitors with flanged leads.

DESCRIPTION

The capacitors consist of a thin rectangular ceramic plate, both sides of which are metallized. The tinned connecting leads are secured using a high melting point solder. The capacitors are encapsulated in epoxy lacquer, which is resistant to all commonly used cleaning solvents. They have small dimensions and narrow tolerances on the lead spacing.

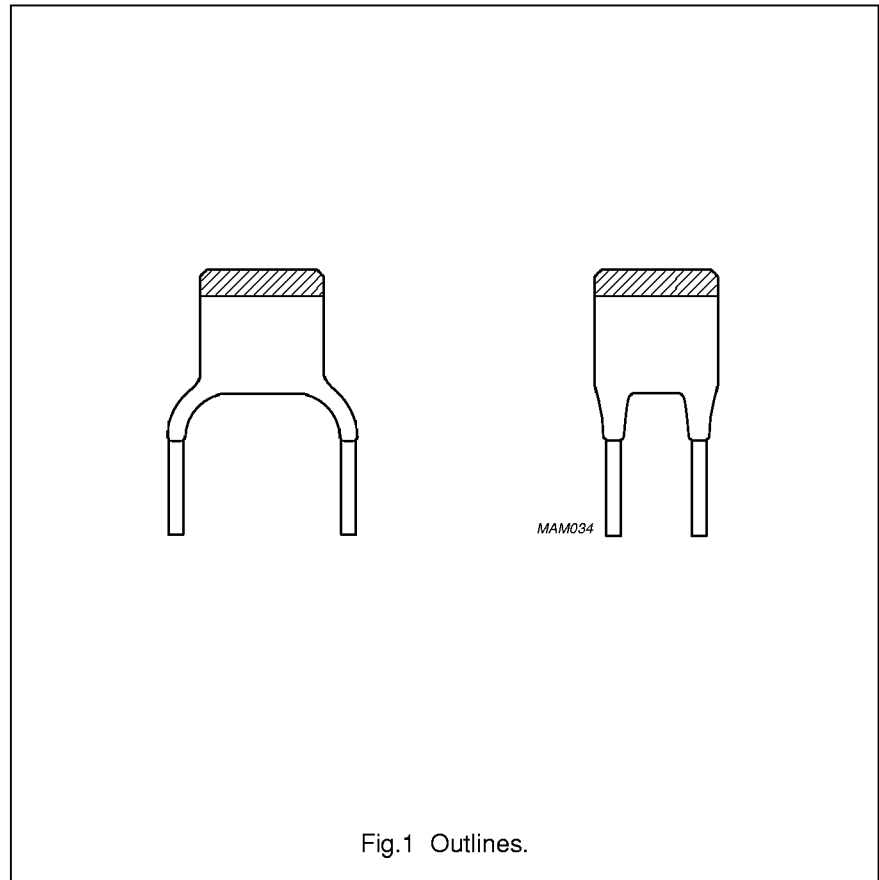


Fig.1 Outlines.

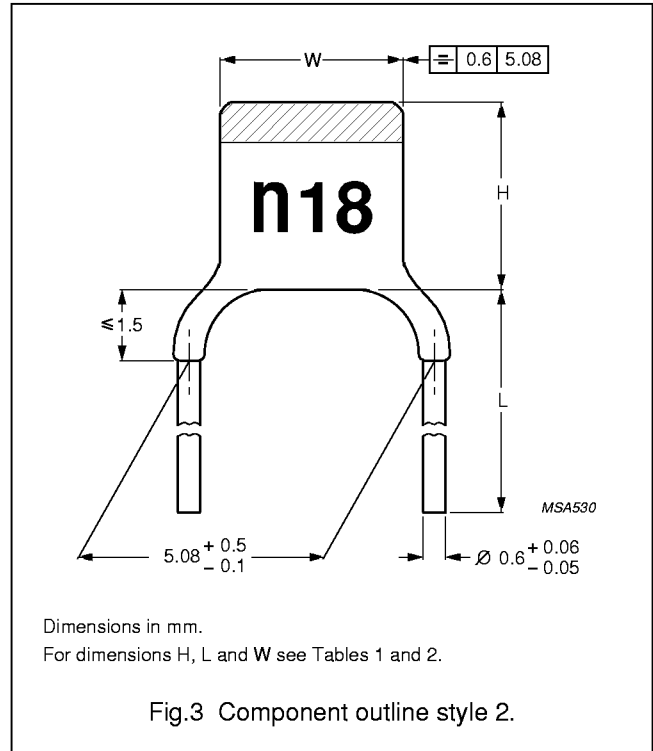
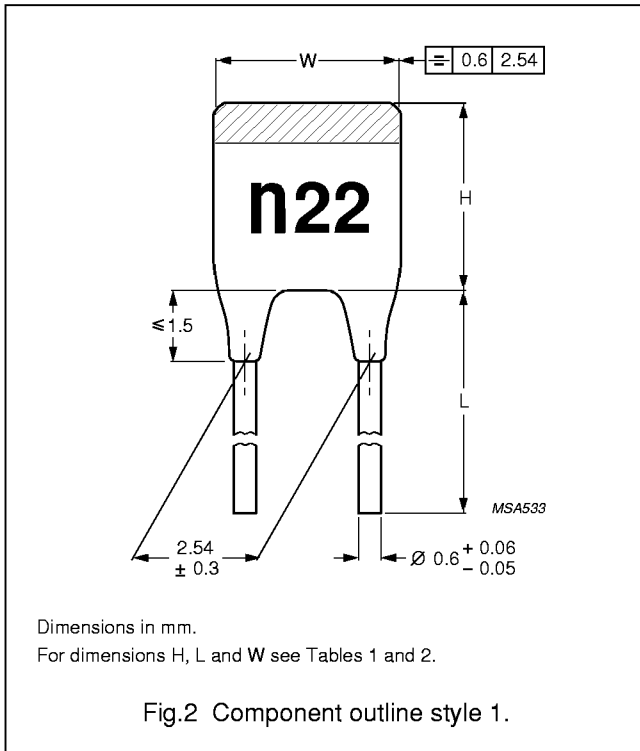
QUICK REFERENCE DATA

DESCRIPTION	VALUE		
	2222 630	2222 640	2222 629
Capacitance range	180 to 6800 pF (E12 series)	1 000 to 15 000 pF (E6 series)	1 000 to 47 000 pF (E3 series)
Dielectric material	K2000	K5000	K14000
Rated DC voltage	100 V	100 V	63 V
Tolerance on capacitance	±10%	-20/+50%	-20/+80%
Sectional specification	IEC 384-9 (2C2 and 2E1)	IEC 384-9 (2E2)	IEC 384-9
Climatic category (IEC 68)	55/125/56	55/085/21	10/085/21

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MECHANICAL DATA



Marking

The body of the capacitors is tan coloured. The capacitors also have a colour mark on top indicating the temperature dependency of the capacitance:

- yellow for type 2222 630
- blue for type 2222 640
- green for type 2222 629

The capacitance value is indicated by a marking code in a contrasting colour on the body.

Refer to the Tables of data sheet "Class 2, 63 V and 100 V (DC) (flanged types)" for marking codes.

Mounting

When bending, cutting or flattening, the leads should be relieved of the applied load by supporting them at the capacitor body.

Soldering conditions:

- max. 265 °C, max. 10 s.

Lacquer on the leads

When the capacitors shown in Figs 2 and 3 are mounted on printed-circuit boards with a thickness of 1.5 mm and

with holes of 1.3 mm diameter or on printed-circuit boards with a thickness of 1 mm and with holes of 0.8 mm diameter there will be no lacquer on the leads at the lower side of the board. For capacitors with a maximum thickness greater than 2.3 mm and lead pitch of 5.08 mm, the lacquer on the leads extends less than 2 mm.

Physical dimensions

Table 1 Capacitor dimensions and mass

SIZE ⁽¹⁾	W ⁽²⁾ (mm)	H ⁽²⁾ (mm)	MASS (g)
I	3.6 (-1.1)	3.7 (-1.2)	≈0.14
IIA	3.9 (-1.4)	4.0 (-1.5)	≈0.15
IIB	4.5 (-1.8)	4.7 (-2.0)	≈0.16
III	5.3 (-1.8)	5.5 (-2.0)	≈0.17
IV	6.2 (-2.0)	6.4 (-2.2)	≈0.20
V	6.2 (-2.0)	8.6 (-2.6)	≈0.23

Notes

1. The thickness of the capacitors does not exceed 2.3 mm with the exception of 2222 630 ..181 and 2222 630 ..221 (maximum thickness 2.5 mm).
2. Tolerances are given between parentheses.

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PACKAGING

For details refer to this handbook, Chapter "*Miniature ceramic plate capacitors*", Section "*General data*".

ORDERING INFORMATION**Table 2** Catalogue numbers

PITCH P	LEAD DIAMETER d	STYLE	CATALOGUE NUMBERS ⁽¹⁾	
			L ≥ 15 mm	L = 6 +0/-2 mm
2.54 mm (0.1 in)	0.6 mm (0.024 in)	1	2222 630 01...	2222 630 05...
			2222 640 01...	2222 640 05...
			2222 629 01...	2222 629 05...
5.08 mm (0.2 in)	0.6 mm (0.024 in)	2	2222 630 03...	2222 630 06...
			2222 640 03...	2222 640 06...
			2222 629 03...	2222 629 06...

Note

1. Catalogue numbers to be completed by adding the 3-digit suffix for required capacitance values. Refer to the Tables of data sheet "*Class 2, 63 V and 100 V (DC) (flanged types)*".