

DATA SHEET

**Class 1, 100 V (DC)
(flanged types)
Miniature ceramic plate
capacitors**

Product specification
Supersedes data of 04 November 2002

2003 April 18

Miniature ceramic plate capacitors

Class 1, 100 V (DC) (flanged types)

FEATURES

- High-frequency circuits
- Temperature compensating
- High stability
- Space saving.

APPLICATIONS

In a great variety of electronic circuits, e.g. in filters and tuning circuits where high stability and/or temperature compensation are a requirement. Because of their small size the capacitors are suitable for use in circuitry with high component density.

DESCRIPTION

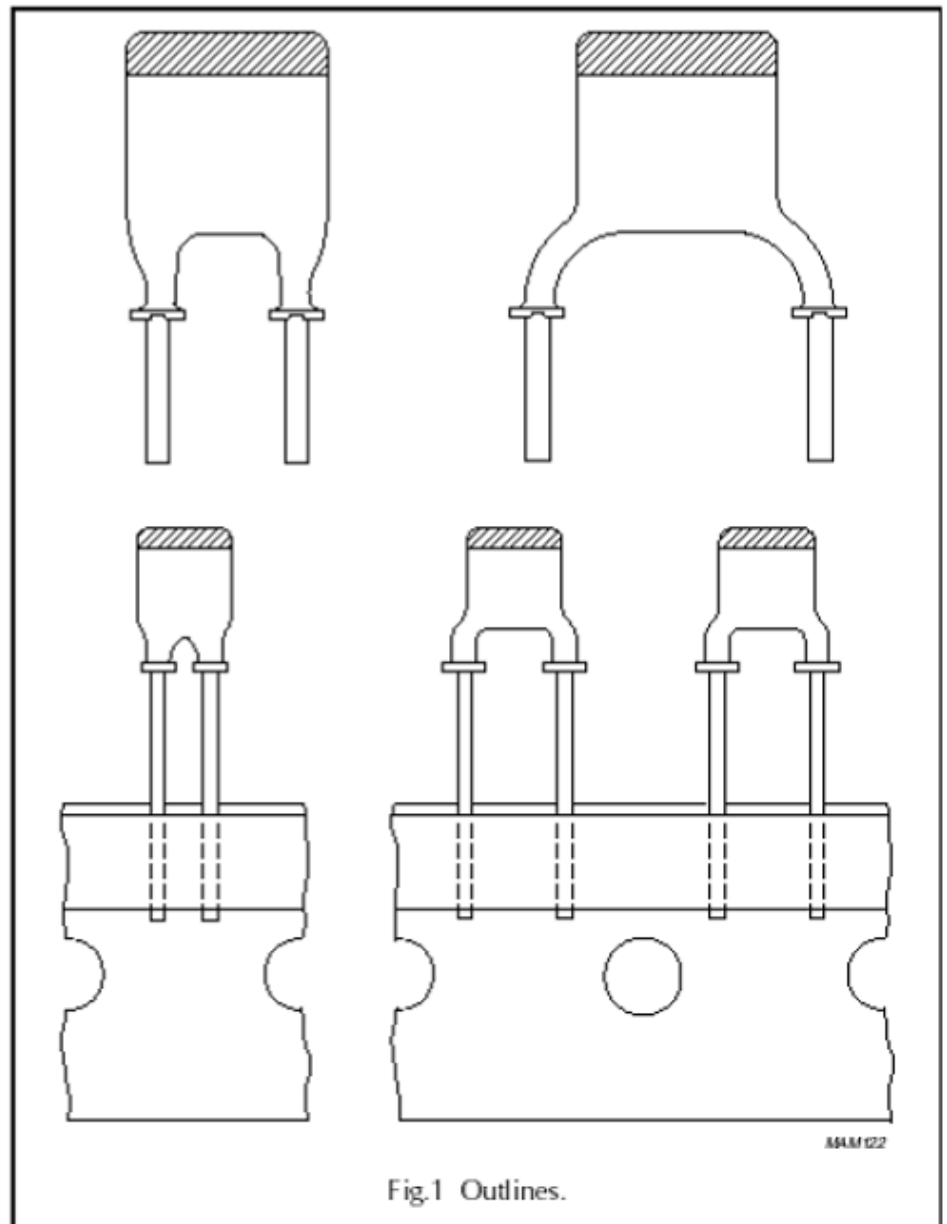
The capacitors consist of a thin rectangular ceramic plate, both sides of which are metallized, and tinned connecting leads are secured using a high melting point solder. The capacitors are encapsulated in epoxy lacquer, which is resistant to all commonly used cleaning solvents. They have small dimensions and narrow tolerances on the lead spacing. The leads are provided with a flange, which guarantees that the leads are free of lacquer, and its shape allows soldering gasses to escape freely, ensuring excellent solderability. This makes the capacitors suitable for both hand-mounting and automatic insertion. The electrical properties are characterized by low losses, a narrow tolerance on capacitance (± 0.25 pF or 2%), high stability and, owing to the absence of silver, an extremely good DC behaviour.

QUICK REFERENCE DATA

DESCRIPTION	VALUE
Capacitance range (E12 series)	0.56 to 680 pF
Rated DC voltage	100 V
Tolerance on capacitance	$\pm 2\%$ or ± 0.25 pF
Temperature coefficients	P100, NP0, N150, N750 and N1500; note 1
Sectional specification	IEC 60384-8
Climatic category (IEC 60068)	55/085/21 (N150, N750); 55/125/56 (P100, NP0, N1500)

Note

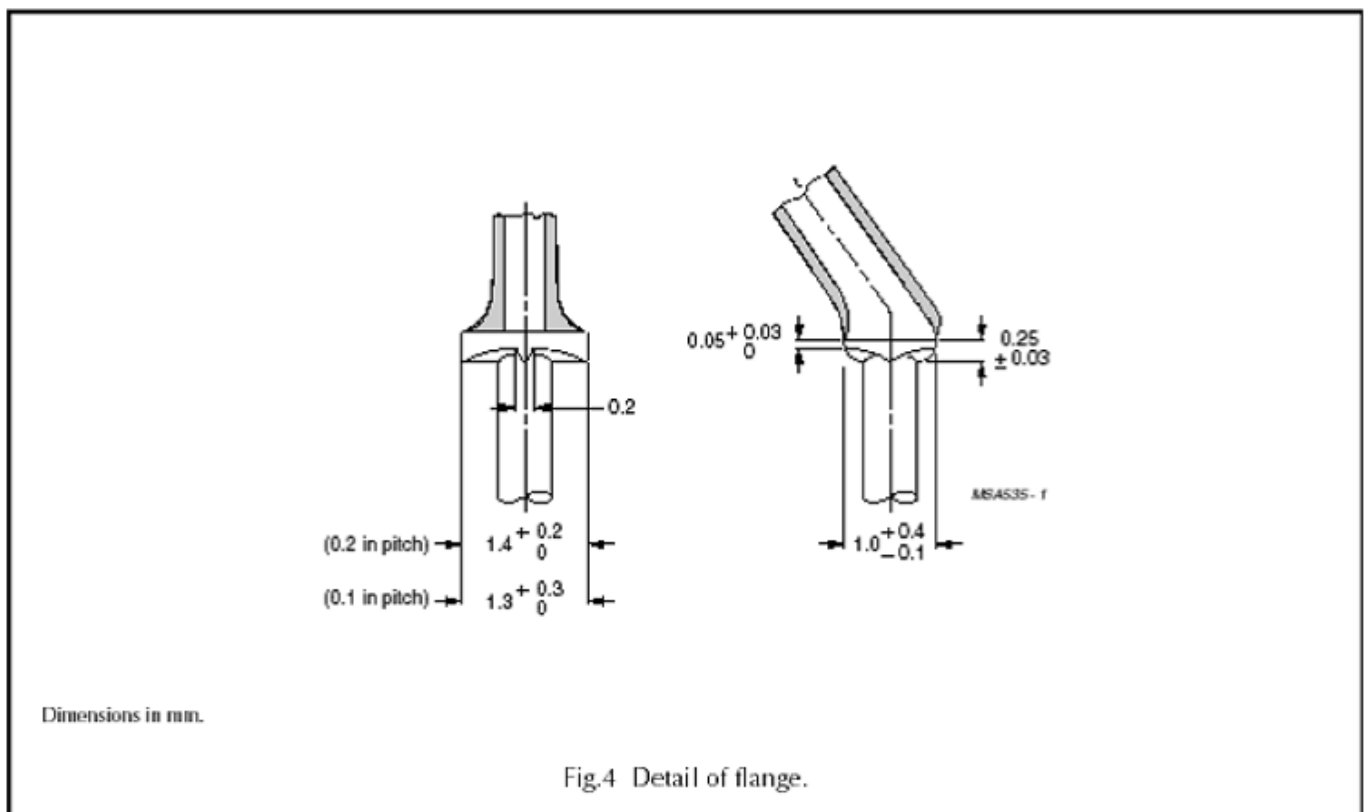
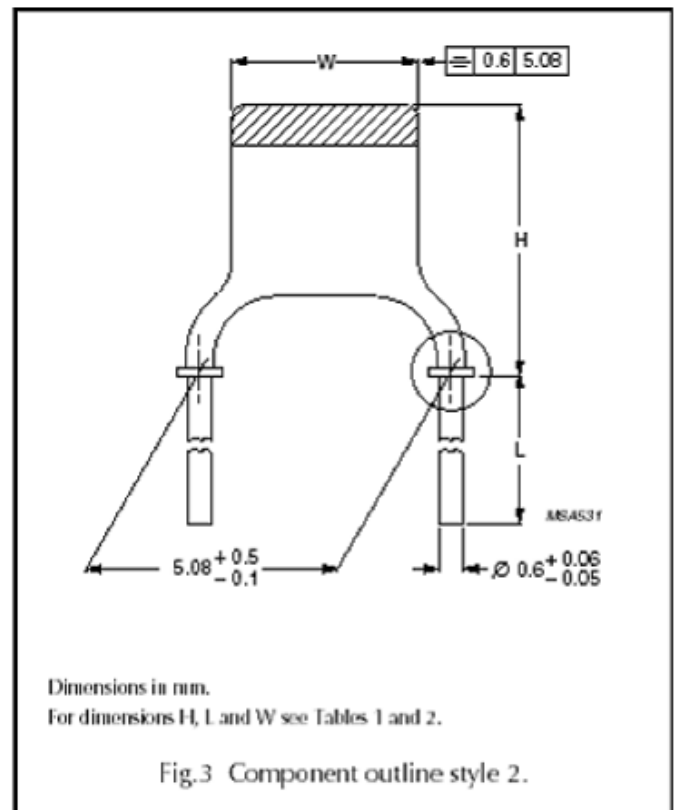
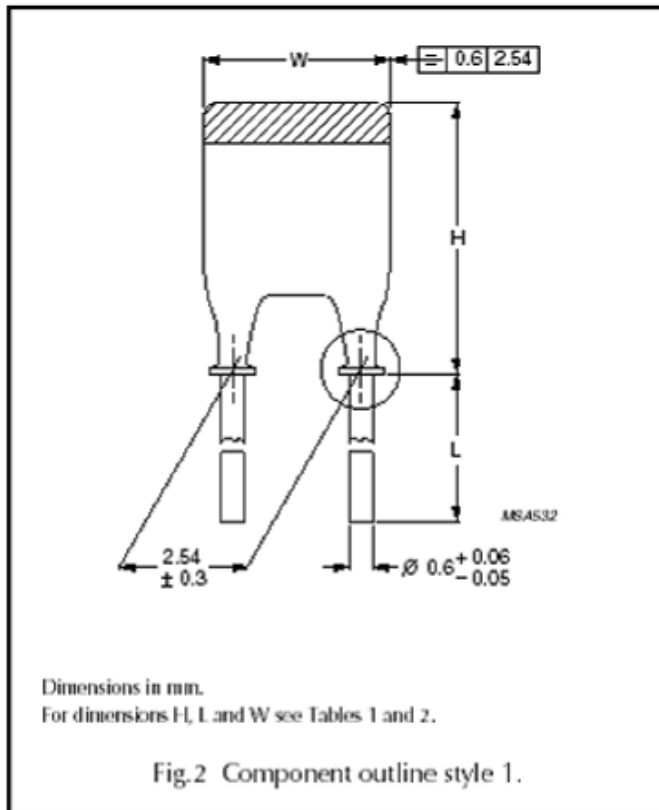
1. N075, N220, N330, N470 available on request.



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MECHANICAL DATA



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Table 3 Conditions for Table 4; capacitors with temperature coefficient P100 (M7G), rated voltage 100 V (DC)

DESCRIPTION	VALUE
Capacitance range	0.56 to 47 pF (E12 series)
Temperature coefficient of the capacitance $\left(\frac{\Delta C}{C \Delta T}\right)$	$100 \times 10^{-6}/K$
Tolerance on the temperature coefficient	$\pm 30 \times 10^{-6}/K$
Marking code of the temperature coefficient	AG
Climatic category (IEC 60 068)	55/125/56

Table 4 Preferred capacitance range, temperature coefficient P100 (M7G)

CAPACITANCE VALUE ⁽¹⁾ (pF)	TOLERANCE	SIZE (see Table 1)	MARKING	SUFFIX OF CATALOGUE NUMBER (see Table 2)
0.56	±0.25 pF	I ⁽²⁾	p56	03567
0.68	±0.25 pF	I ⁽²⁾	p68	03687
0.82	±0.25 pF	I ⁽²⁾	p82	03827
1.0	±0.25 pF	I ⁽³⁾	1p0	03108
1.2	±0.25 pF	I	1p2	03128
1.5	±0.25 pF	I	1p5	03158
1.8	±0.25 pF	I	1p8	03188
2.2	±0.25 pF	I	2p2	03228
2.7	±0.25 pF	I	2p7	03278
3.3	±0.25 pF	I	3p3	03338
3.9	±0.25 pF	I	3p9	03398
4.7	±0.25 pF	I	4p7	03478
5.6	±0.25 pF	I	5p6	03568
6.8	±0.25 pF	I	6p8	03688
8.2	±0.25 pF	IIA	8p2	03828
10	±2%	IIA	10p	04109
12	±2%	IIB	12p	04129
15	±2%	IIB	15p	04159
18	±2%	III	18p	04189
22	±2%	III	22p	04229
27	±2%	IV	27p	04279
33	±2%	IV	33p	04339
39	±2%	V	39p	04399
47	±2%	V	47p	04479

Notes

1. Other capacitance values and tolerances are available on request.
2. Maximum thickness 2.7 mm.
3. Maximum thickness 2.5 mm.