

Soft Ferrites

Multilayer suppressors

MULTILAYER SUPPRESSORS

Multilayer suppressors are a powerful solution for EMI/RFI attenuation for electronic equipment. Supplied in four standard sizes (0603, 0805, 1206 and 1806), they have impedances between 30 and 1 000 Ω at 100 MHz.

When installed in series with signal and/or power circuits, high frequency noise is suppressed. There is no need for

Product construction

The use of silver for electrodes and terminations in multilayer suppressors ensures high electrical conductivity, which minimizes heat generation and crosstalk.

The internal construction can be single layer or multilayer, depending on impedance requirements. Single layer

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TYPE NUMBER STRUCTURE

Type numbers for these products consist of the following:

- Product type
- Size
- Material
- Impedance.

Product type

MLS: multilayer suppressor.

Size

0603: 1.6 × 0.80 mm

0805: 2.0 × 1.25 mm

1206: 3.2 × 1.60 mm

1806: 4.5 × 1.60 mm.

Material

4S4

4S7

Impedance value

Expressed in ohms (Ω)

First two digits are significant figures

Last digit is the number of zeros to follow.

EXAMPLES

600: 60 Ω

101: 100 Ω

121: 120 Ω

151: 150 Ω

301: 300 Ω

102: 1000 Ω

Example of the ordering code: MLS0603-4S7-600

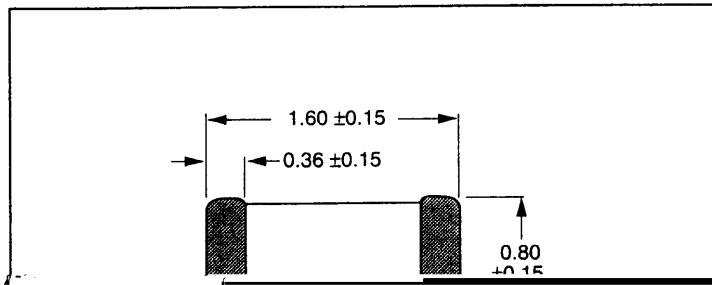
| TYPE | SIZE | MATERIAL | IMPEDANCE |
|------|------|----------|-----------|
| MLS | 0603 | 4S7 | 60 |

Standard products are delivered taped on reel and have a tolerance on impedance of 25%. For different specifications a fifth group is added to the type number.

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MLS0603

MULTILAYER SUPPRESSORS MLS0603

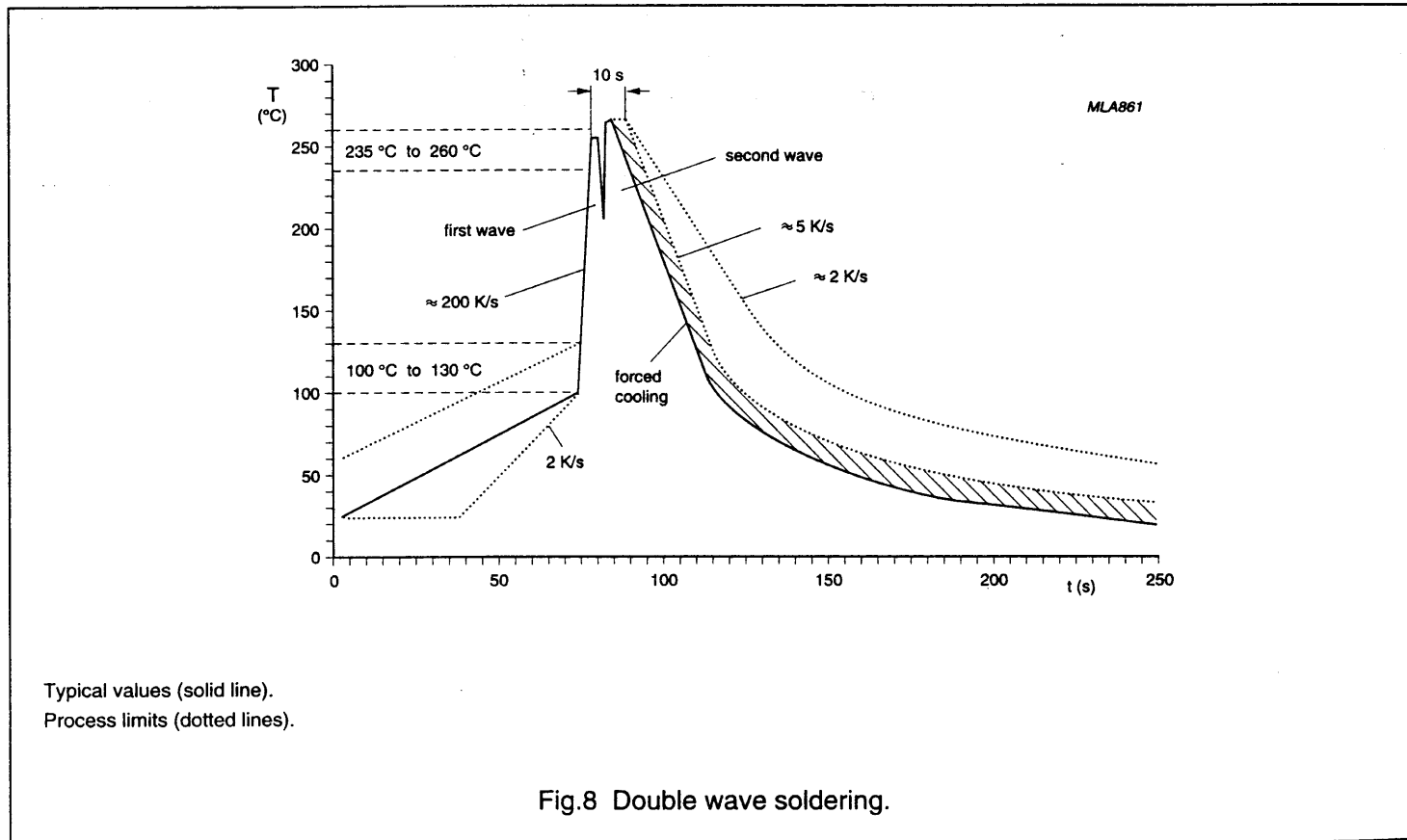
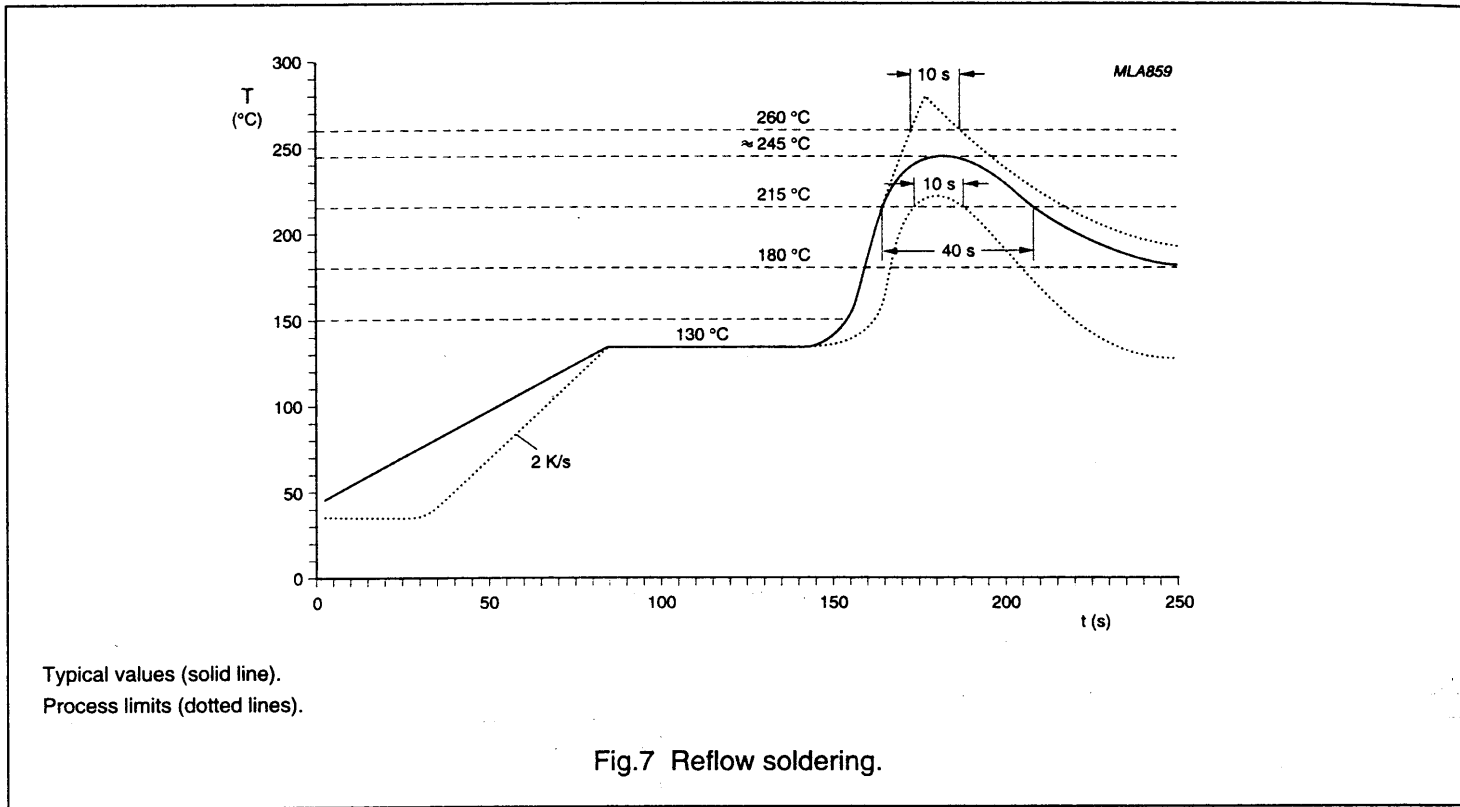


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MOUNTING

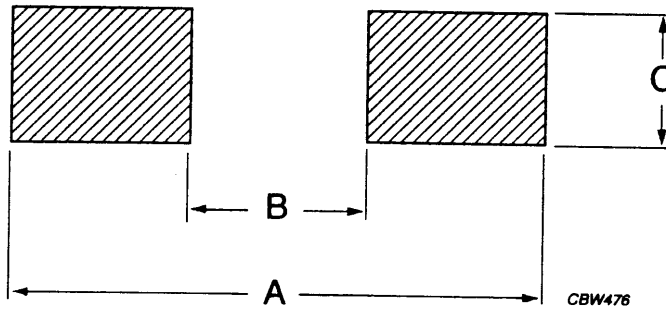
Soldering profiles



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Dimensions of solderlands



For dimensions see Table 1.

Fig.9 Recommended dimensions of solder lands.

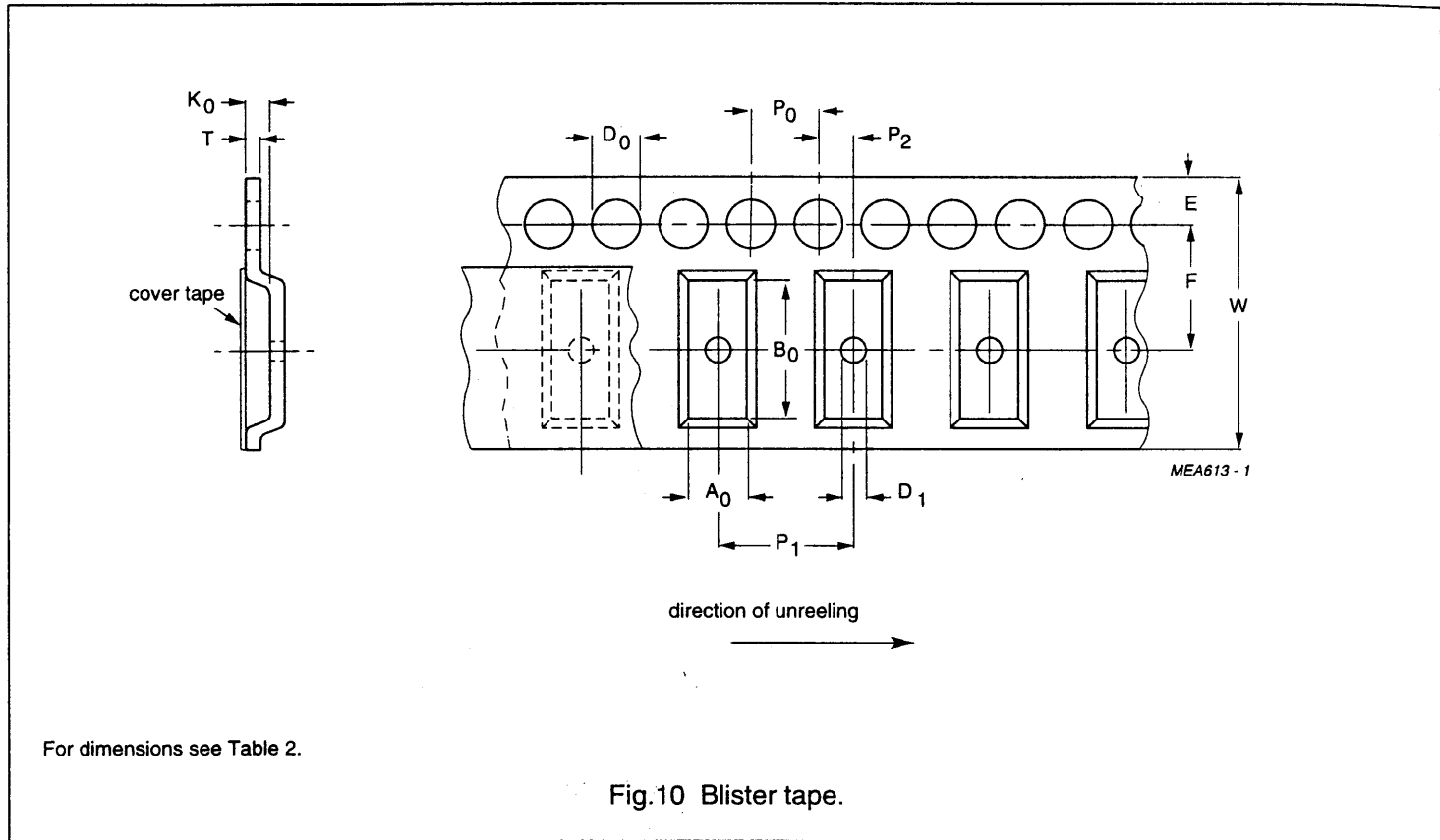
Table 1 Solder land dimensions; see Fig.9

| CASE SIZE | FOOTPRINT DIMENSIONS (mm) | | |
|-----------|---------------------------|-----|------|
| | A | B | C |
| 0603 | 2.1 | 0.7 | 0.7 |
| 0805 | 2.6 | 1.0 | 1.0 |
| 1206 | 4.4 | 2.2 | 1.35 |
| 1806 | 6.0 | 3.0 | 1.35 |

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BLISTER TAPE AND REEL DIMENSIONS



For dimensions see Table 2.

Fig.10 Blister tape.

Table 2 Dimensions of blister tape for relevant product size code; see Fig.10

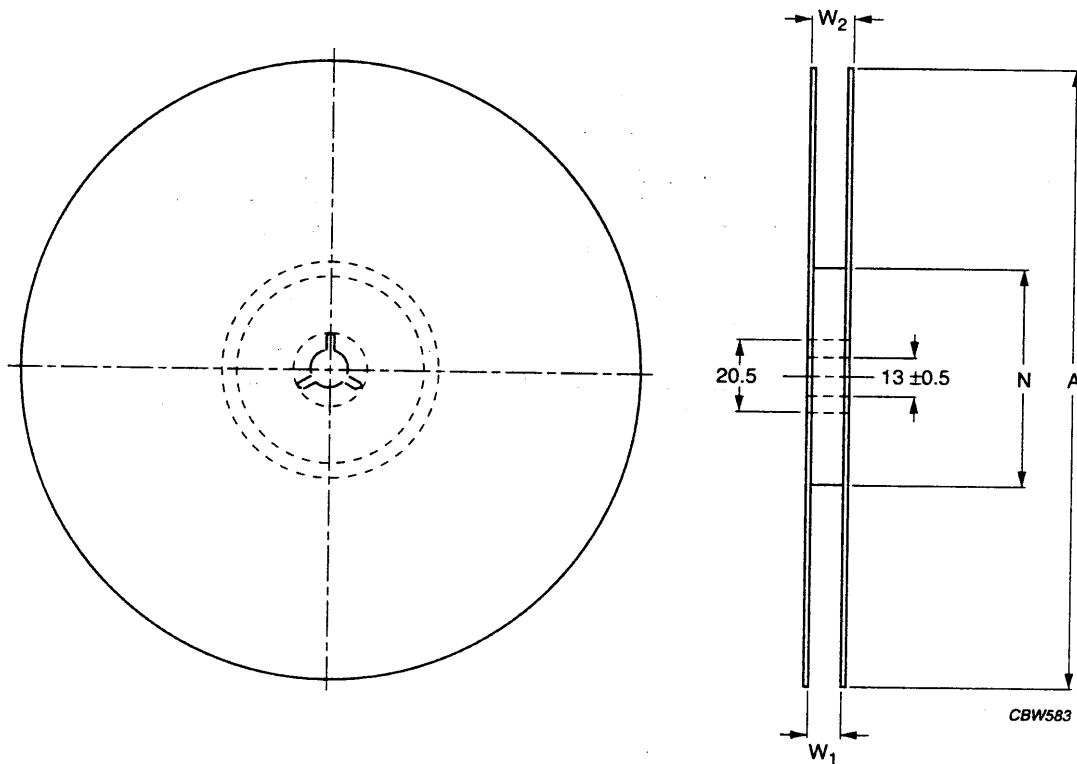
| DIMENSION | PRODUCT SIZE CODE | | | |
|---------------------------------|-------------------|---------------|---------------|----------------|
| | 0603 | 0805 | 1206 | 1806 |
| A_0 | 1.1 ± 0.1 | 1.6 ± 0.1 | 2.0 ± 0.1 | 2.0 ± 0.1 |
| B_0 | 1.9 ± 0.1 | 2.4 ± 0.1 | 3.6 ± 0.1 | 5.0 ± 0.2 |
| K_0 minimum clearance; note 1 | 1.1 | 1.2 | 1.2 | 2.0 |
| W | 8.0 ± 0.2 | 8.0 ± 0.2 | 8.0 ± 0.2 | 12.0 ± 0.3 |
| E | - | - | - | - |
| F | - | - | - | - |
| $D_{0 \text{ min}}$ | 0.5 | 0.5 | 0.5 | 0.5 |
| $D_{1 \text{ min}}$ | 0.5 | 0.5 | 0.5 | 0.5 |
| P_0 | 4.0 | 4.0 | 4.0 | 8.0 |
| P_1 | 4.0 ± 0.1 | 4.0 ± 0.1 | 4.0 ± 0.1 | 4.0 ± 0.1 |
| P_2 | - | - | - | - |
| T_{max} | 0.3 | 0.3 | 0.3 | 0.3 |

Note

1. Typical product displacement in pocket.

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Dimensions in mm.
For dimensions see Table 3.

Fig.11 Reel.

Table 3 Reel dimensions; see Fig.11

| TAPE WIDTH | DIMENSIONS (mm) | | | |
|------------|-----------------|--------|----------------|----------------|
| | A | N MIN. | W ₁ | W ₂ |
| 8 | 178 ±2 | 50 | 10 ±1.5 | — |
| 12 | | | 14 ±1.5 | — |