



ADSL low pass filter

for Infineon ICs GEMINAX family
EP 7, 2.83 mH

Ordering code: **B78417A1744A003**

Date: **October 2008**

SMD
Application

- Matched to Infineon ICs GEMINAX family
PEF 55008, 55208, 55016, 55218, 55602

Feature

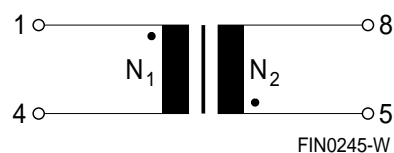
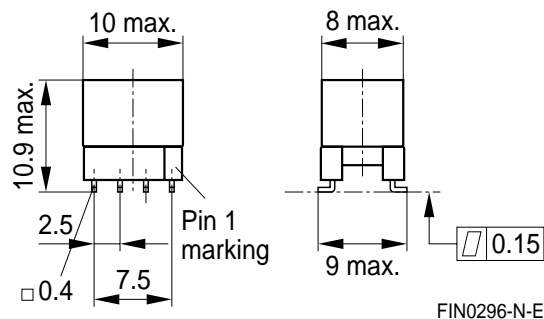
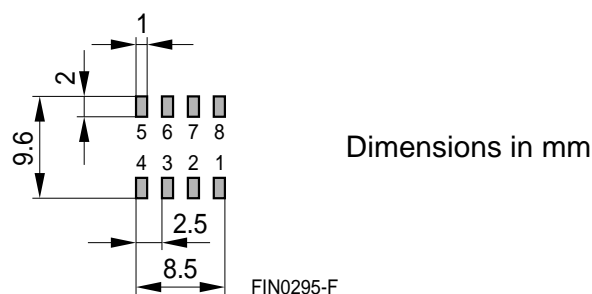
- RoHS-compatible

Marking

- Manufacturer, middle block of ordering code, date code

Delivery mode and packing unit

- 24-mm blister tape
- Packing unit: 320 pcs.

Pinning

Dimensional drawing

Layout recommendation


Dimensions in mm

Technical data and measuring conditions

| | |
|---|---|
| Main inductance L (4-5) | 10 kHz, 100 mV, short 1-8 |
| Stray inductance L _{stray} (1-4) | 100 kHz, 100 mV, short 5-8 |
| Interwinding capacitance C _i (4-5) | 100 kHz, 100 mV |
| Test voltage V _{test} | 50 Hz, 1 s, N ₁ against N ₂ |
| Operating temperature range | -40 ... +85 °C |
| Weight | Approx. 2.0 g |

Characteristics and ordering code

(electrical specifications at 25 °C)

| | | |
|--|-----------------|------|
| Ordering code | B78417A1744A003 | |
| Type/Core | EP 7 | |
| N ₁ : N ₂ | 1 : 1 | |
| L | 2.83 ±10% | mH |
| L _{stray} (typ.) | 57 | μH |
| C _i (typ.) | 2.0 | pF |
| R _{DC} (N ₁) (typ.) | 1.5 | Ω |
| R _{DC} (N ₂) (typ.) | 1.5 | Ω |
| V _{test} | 1500 | V AC |

Cautions and warnings

- Please note the recommendations in our Inductors data book (latest edition) and in the data sheets.
 - Particular attention should be paid to the derating curves given there.
 - The soldering conditions should also be observed. Temperatures quoted in relation to wave soldering refer to the pin, not the housing.
- If the components are to be washed varnished it is necessary to check whether the washing varnish agent that is used has a negative effect on the wire insulation, any plastics that are used, or on glued joints. In particular, it is possible for washing varnish agent residues to have a negative effect in the long-term on wire insulation.
- The following points must be observed if the components are potted in customer applications:
 - Many potting materials shrink as they harden. They therefore exert a pressure on the plastic housing or core. This pressure can have a deleterious effect on electrical properties, and in extreme cases can damage the core or plastic housing mechanically.
 - It is necessary to check whether the potting material used attacks or destroys the wire insulation, plastics or glue.
 - The effect of the potting material can change the high-frequency behaviour of the components.
- Ferrites are sensitive to direct impact. This can cause the core material to flake, or lead to breakage of the core.
- Even for customer-specific products, conclusive validation of the component in the circuit can only be carried out by the customer.

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