



ADSL low pass filter

for Infineon ICs GEMINAX family
EP 7, 6.79 mH

Ordering code: **B78417A1838A003**

Date: **October 2008**

SMD
Application

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

Feature

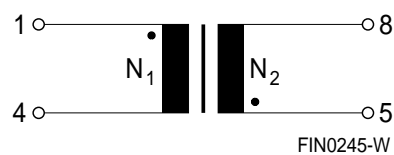
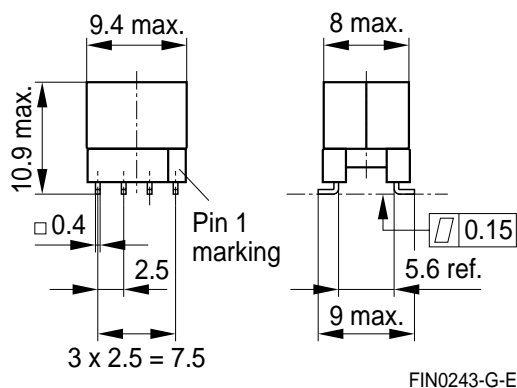
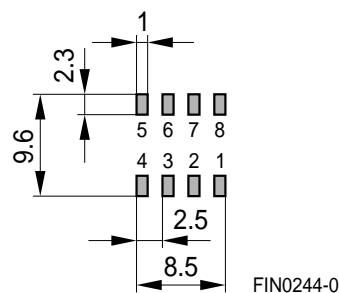
- RoHS-compatible

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 codes (electrical specifications at 25 °C)

Ordering code	B78417A1838A003	
Type/Core	EP 7	
$N_1 : N_2$	1 : 1	
L	6.79 ±10%	mH
L_{stray} (typ.)	160	µH
C_i (typ.)	3.0	pF
$R_{\text{DC}}(N_1)$ (typ.)	3.35	Ω
$R_{\text{DC}}(N_2)$ (typ.)	3.35	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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