



## **ADSL low pass filter**

for Infineon ICs GEMINAX family  
EP 13, 19.95 mH

**Ordering code:**        **B78421A1639A003**

**Date:**                    **October 2008**

**SMD**
**Application**

- Filter choke for Infineon ICs (without teletax function) GEMINAX family  
PEF 55008, 55208, 55016, 55218, 55602

**Feature**

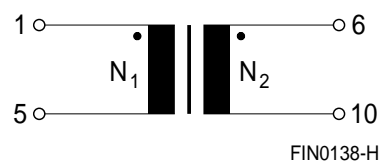
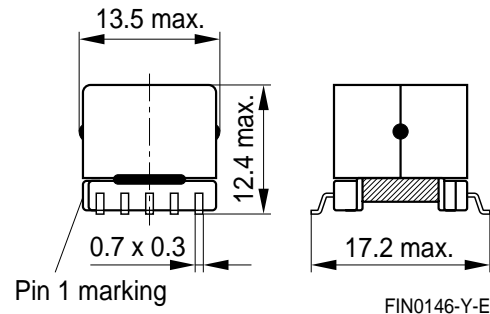
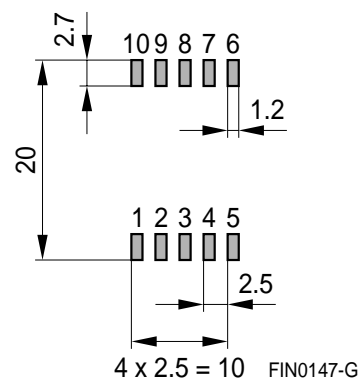
- RoHS-compatible

**Marking**

- Manufacturer, middle block of ordering code, date code

**Delivery mode and packing unit**

- 32-mm blister tape
- Packing unit: 180 pcs.

**Pinning**

**Dimensional drawing**

**Layout recommendation**


Dimensions in mm

**Technical data and measuring conditions**

Main inductance L (1-10)	10 kHz, 100 mV, short 5-6
Interwinding capacitance C <sub>i</sub> (1-6)	100 kHz, 100 mV
Test voltage V <sub>test</sub>	50 Hz, 1 s; N <sub>1</sub> against N <sub>2</sub>
Operating temperature range	-40 ... +85 °C
Weight	Approx. 6.0 g

**Characteristics and ordering code**

(electrical specifications at 25 °C)

Ordering code	B78421A1639A003	
Type/Core	EP 13	
N <sub>1</sub> : N <sub>2</sub>	1 : 1	
L	19.95 ±7%	mH
C <sub>i</sub> (typ.)	4	pF
R <sub>DC (N1)</sub> (typ.)	3.15	mΩ
R <sub>DC (N2)</sub> (typ.)	3.15	mΩ
V <sub>test</sub>	500	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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