

# **ADSL low pass filter**

for Infineon ICs GEMINAX family EP 7, 436.5  $\mu H$ 

Ordering code: B78417A1822A003
Date: March 2008

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# Transformers for information technology (xDSL)

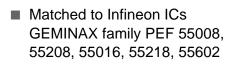
#### B78417A1822A003

EP7

#### **ADSL** low pass filter

# SMD

# **Dimensional drawing**



#### Feature

Application

RoHS-compatible

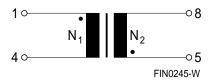
#### Marking

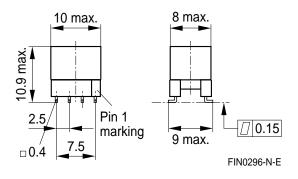
Manufacturer, middle block of ordering code, date code

#### Delivery mode and packing unit

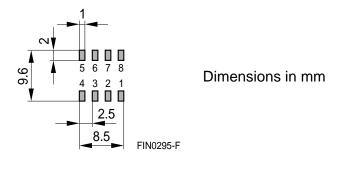
- 24-mm blister tape
- Packing unit: 320 pcs.

#### Pinning





Layout recommendation



# Technical data and measuring conditions

Main inductance L (1-8)	10 kHz, 100 mV, short 4-5
Resistance R <sub>DC</sub>	DC resistance of N <sub>1</sub> /N <sub>2</sub>
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. 2.0 g

# Characteristics and ordering codes

(electrical specifications at 25 °C)

Ordering code	B78417A1822A003	
Type/Core	EP 7	
N <sub>1</sub> : N <sub>2</sub>	1:1	
L	436.5 ±5%	μH
R <sub>DC (N1)</sub> (typ.)	0.41	Ω
R <sub>DC (N2)</sub> (typ.)	0.41	Ω
V <sub>test</sub>	1500	V AC

Important notes at the end of this document.

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#### **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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