



ISDN transformers

U_{K0} interface, 2B1Q
EP 13, 14.47 mH, 1:1:1

Series/Type: B78421A1720A003

Date: October 2008

SMD

Applications

- Matching to Infineon ICs Q-Smint
PEF 80912, 80913
PEF 81912, 81913
PEF 82912, 82913

Feature

- RoHS-compatible

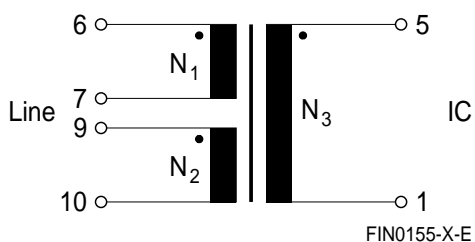
Marking

- Manufacturer, middle block of ordering code, date code

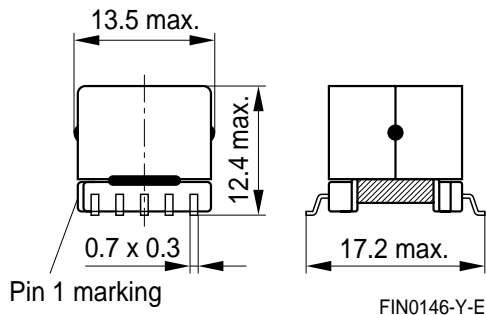
Delivery mode and packing unit

- 32-mm blister tape, 330-mm reel
- Packing unit upon request

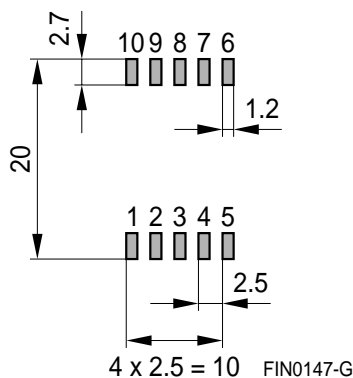
Pinning



Dimensional drawing



Layout recommendation



Dimensions in mm

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Technical data and measuring conditions

Main inductance L (6-10)	10 kHz, 100 mV, short 9-7
Stray inductance L _{stray} (6-10)	10 kHz, 100 mV, short 5-1, 9-7
Interwinding capacitance C _i (7-1)	100 kHz, 100 mV, short 9-7
Resistance R _{DC (Line)} ; R _{DC (IC)}	R _{DC(Line)} : short 7-9; R _{DC(IC)} : –
Test voltage V _{test}	50 Hz, 1 s; N ₁ , N ₂ against N ₃
DC current I _{DC}	With I _{DC} bias L drops < 5%
Transmission code	2B1Q
Operating temperature range	–40 °C ... +85 °C
Weight	Approx. 6.4 g

Characteristics and ordering code

(electrical specifications at 25 °C)

Ordering code	B78421A1720A003	
Type/Core	EP 13	
N ₁ : N ₂ : N ₃	1 : 1 : 1	
L	14.47 ±8%	mH
L _{stray} (typ.)	160	μH
C _i (typ.)	29	pF
R _{DC (Line)} (typ.)	7.8	Ω
R _{DC (IC)} (typ.)	3.8	Ω
V _{test}	2000	V AC
I _{DC} (typ.)	60	mA

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.

Important notes

The following applies to all products named in this publication:

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