RF transformers

6 dB directional coupler

Series/Type: **B78408A1899A003**

Date: March 2008

SMD

Technical data

- Double-aperture transformer
- Recommended frequency range: 30 MHz to 862 MHz
- Operating temperature: –40 °C to +85 °C
- Weight: approx. 80 mg

Feature

- RoHS-compatible

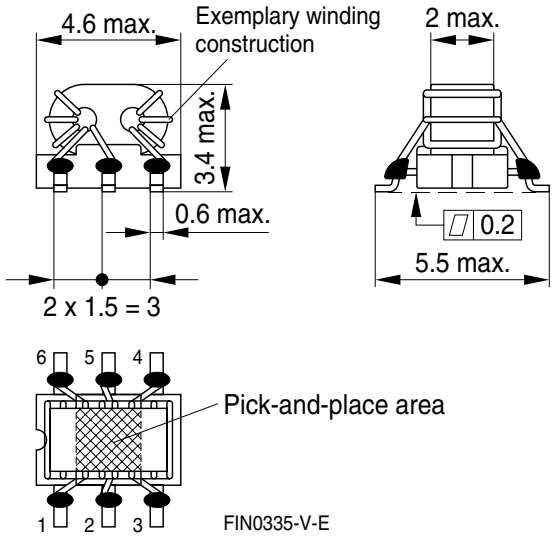
Marking

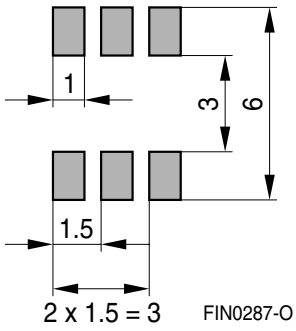
- No marking on components
- Minimum data on reel: Manufacturer, ordering code, quantity, date code

Delivery mode and packing unit

- 12-mm blister tape to IEC 60286-3, wound on 330-mm ∅ reel
- Packing unit: 2100 pcs./reel

Dimensional drawing

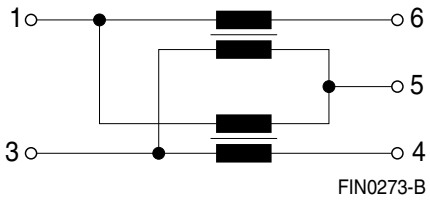


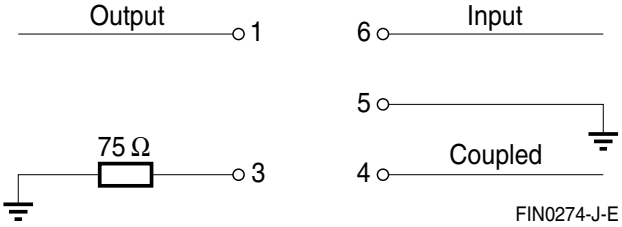


Layout recommendation

Dimensions in mm

Circuit diagram and test arrangement





Insertion loss

Measurement instrument: Network analyzer
Impedance: 75 Ω
Values specified at 25 °C

Frequency (MHz)	30	470	862
Mainline loss Input/Output (dB)	2.3 ±0.3	2.2 ±0.3	2.4 ±0.5
Coupling Input/Coupled (dB)	6.8 ±0.3	6.6 ±0.3	6.3 ±0.6

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:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.**

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