SMD Transformer

EF 16 PTH series

Series/Type: **B78310P8078A002**
Ordering code:

Date: May 2022

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Construction



- Ferrite core
- High robustness
- Compact design
- PTH construction
- Max. dimensions: L x W x H: 18.0 mm x 12.7 mm x 19.5 mm

Features

- Height: 19.5 mm max
- Footprint: 7.5 mm x 7.5 mm
- RoHS compatible

Applications

- Flyback Topology

Marking

- Product brand, middle block of ordering code, date code, pin 1 marker, production place identification code

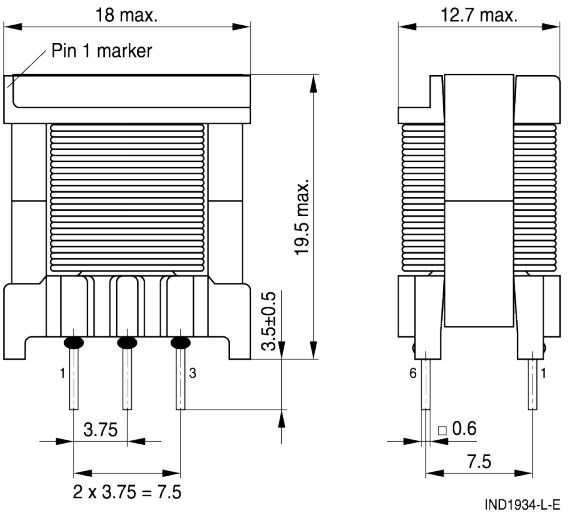
Delivery Mode

- Stick magazine
- Packing unit: 34 pcs per tube, 2040 pcs per carton

Dimensional drawing and recommendation

Part tolerances to ISO 2768-cL / ISO 8015.
Size ISO 14405 Ⓔ
All dimensions in mm

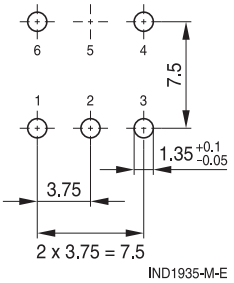
IND1276-L-E



IND1934-L-E

Recommended PCB layout (Top View)

Recommended PCB layout
(Top view)



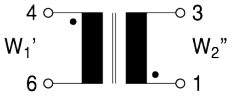
IND1935-M-E

Technical data and measuring conditions

specified at +25 °C if not mentioned otherwise, all values without tolerances are typical values

Inductance L (4 - 6)	3.21 mH ±15% at 10 kHz, 50 mV
Leakage inductance LL (4 - 6)	111 µH max. at 10 kHz, 50 mV, short (1, 3)
Turns ratio W1 : W2	192 : 24
DC resistance R_{DC} W1 (4 - 6)	3.9 Ω ±20%
DC resistance R_{DC} W2 (1 - 3)	0.11 Ω ±20%
High voltage: (W1 / W2)	1500 V AC (50 Hz, 1 s, 2 mA), routine test
Operating temperature range	–40 °C ... +125 °C (component)
Weight	Approx. 6.7 g

Circuit Diagram

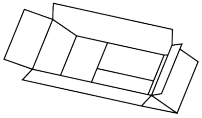


IND1936-N

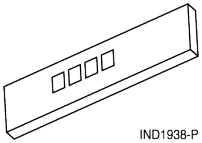
Packing

Specification for packing of components

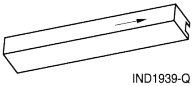
1. Outer carton box:
649 x 240 x 175 mm, 1 pcs


IND1937-O

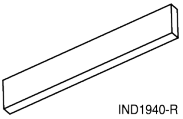
2. Inner carton box:
619 x 210 x 28 mm, 4 pcs


IND1938-P

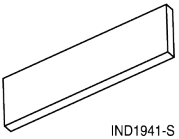
3. Stick magazine:
610 x 26.5 x 11.8 mm, 60 pcs


IND1939-Q

4. Polyfoam:
640 x 165 x 10 mm, 2 pcs


IND1940-R

5. Polyfoam:
620 x 216 x 5 mm, 5 pcs

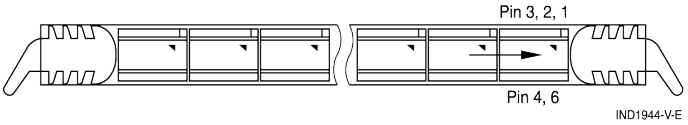

IND1941-S

6. Polyfoam:
216 x 165 x 10 mm, 2 pcs

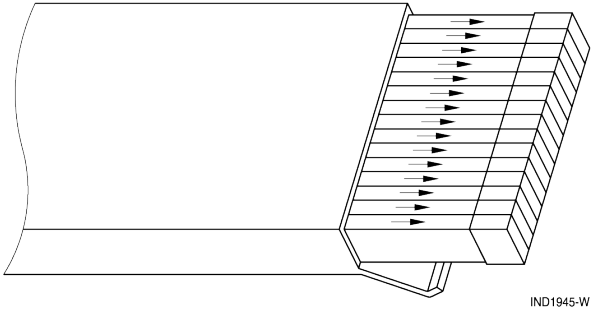

IND1942-T

7. Plug:
25 x 15 x 15 mm, 120 pcs


IND1943-U



IND1944-V-E


IND1945-W

Notes:
1. 34 pcs per tube
2. 510 pcs per inner box
3. 2040 pcs per outer box

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.
  Washing processes may damage the product due to the possible static or cyclic mechanical loads (e.g. ultrasonic cleaning). They may cause cracks to develop on the product and its parts, which might lead to reduced reliability or lifetime.
- 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, wire insulation, plastics or glue.
  - The effect of the potting material can change the high-frequency behaviour of the components.
  - Many coating materials have a negative effect (chemically and mechanically) on the winding wires, insulation materials and connecting points. Customers are always obligated to determine whether and to what extent their coating materials influence the component.
    Customers are responsible and bear all risk for the use of the coating material. TDK Electronics does not assume any liability for failures of our components that are caused by the coating material.
- Ceramics / 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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Important notes

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Release 2020-06