

# **ISDN** transformers

S<sub>0</sub> interface R 10, > 22 mH, 1:1:2:2

Series/Type: B78510P1365A005 Date: October 2008

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### Transformers for information technology (ISDN)

#### S<sub>0</sub> interface

#### B78510P1365A005

R 10

#### Applications

- Use in TE and NT/PBX
- Matched to the ICs
  Infineon PEB/PSB 8090, 8091, 8191, 2080, 2081 ... 2086, 2115, 2186;
  AMD AM79C30A, 79C32A;
  Mietec MTC 2072, 20276

#### Features

- Complies with CCITT 1.430
- Remote power feeding to TE
- RoHS-compatible

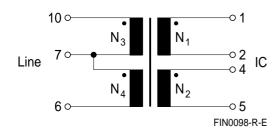
#### Marking

 Manufacturer, middle block of ordering code, date code

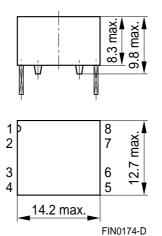
#### Delivery mode and packing unit

- Polyfoam tray
- Packing unit: 500 pcs.

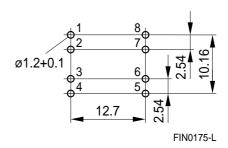
#### Pinning



#### **Dimensional drawing**



Recommended hole arrangement (view in mounting direction)



Dimensions in mm

2



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#### S<sub>0</sub> interface

R 10

#### Technical data and measuring conditions

Main inductance L (1-5)	10 kHz, 30 mV, short 2-4	
Stray inductance L <sub>stray</sub> (1-5)	10 kHz, 30 mV, short 2-4, 6-10	
Interwinding capacitance C <sub>i</sub> (1-10)	10 kHz, 100 mV, short 2-4	
Resistance R <sub>DC (Line)</sub> ; R <sub>DC (IC)</sub>	R <sub>DC(Line)</sub> : short 2-4; R <sub>DC(IC)</sub> : –	
Test voltage V <sub>test</sub>	50 Hz, 1 s; $N_1$ , $N_2$ against $N_3$ , $N_4$	
Operating temperature range	–25 °C +85 °C	
Weight	Approx. 2.7 g	

## Characteristics and ordering code

(electrical specifications at 25 °C)

Ordering code	B78510P1365A005	B78510P1365A005	
Type/Core	R 10	R 10	
$N_1 : N_2 : N_3 : N_4$	1:1:2:2	1:1:2:2	
L	> 22	mH	
L <sub>stray</sub> (typ.)	6.0	μH	
C <sub>i</sub> (typ.)	52	pF	
R <sub>DC (Line)</sub> (typ.)	2.0	Ω	
R <sub>DC (IC)</sub> (typ.)	4.2	Ω	
V <sub>test</sub>	2000	V AC	
ΔI <sub>DC</sub> (typ.)	3.5	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.



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