

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









LAN Modules

Series/Type: B78477P1***A*24

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments
B78477P1009A124		2014-04-25	2014-07-31	2014-10-31
B78477P1008A024		2014-04-25	2014-07-31	2014-10-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

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RJ45 Jacks with integrated magnetics

B78477P100*A*24

10/100 Base-T, dual port, tab down

Applications

- Local Area Networks using Ethernet protocol
- Hubs, switches, routers
- ADSL modems
- Industrial automation equipment using Ethernet protocol for communication

Features

- Fully compliant with IEEE 802.3
- With EMI fingers for shielding
- High electrical performance and EMI suppression
- Optimized for all major transceiver ICs
- Industry standard footprint
- RoHS-compatible

Construction

- Housing: Thermoplastic, UL 94 V-0
- Shield: Ni plated on copper alloy
- Contact: Phosphor bronze,
 - 1.27 µm (50 µ") Ni underplating,
 - $0.4 \mu m$ (15 μ ") selective gold plating
- Connector dimensions comply with TIA-968 (FCC 68.5) dimension requirements

Marking

EPCOS, middle block of ordering code, date code

Delivery mode and packing unit

- Blister trays in carton box
- Packing unit: 320 pcs. per carton box (8 trays)



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B78477P100*A*24

10/100 Base-T, dual port, tab down

Mechanical characteristics

Insertion force	20 N max.
Retention force	75 N min.
Durability	750 mating cycles min.

LED specification

LED colour	Wave length	Forward voltage		
		Max.	Typical	
Green	565 nm	2.6 V	2.2 V	
Yellow	585 nm	2.6 V	2.1 V	

Characteristics and ordering codes

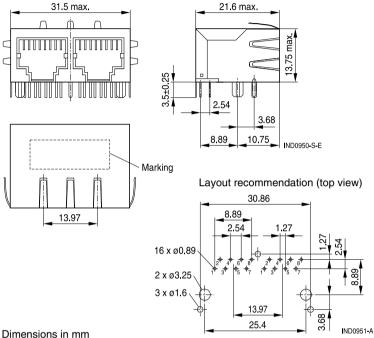
(electrical specifications at +25 °C)

Ordering code	B78477P1008A024	B78477P1009A124	
LED (left - right)	_	Yellow - green	
Turns ratio (primary : secondary)	1CT: 1CT ±3%		_
Inductance L	350 μH min.		100 kHz, 100 mV, 8 mA DC bias
Voltage test V _{test}	1500 V AC		50 Hz, 1 min
(primary : secondary)			
Insertion loss	-1.0 dB max.		1 MHz 100 MHz
Return loss	-18 dB min.		1 MHz 40 MHz
	−14 dB min.		60 MHz
	-12 dB min.		80 MHz
	-10 dB min.		100 MHz
Crosstalk	−33 dB min.		1 MHz 100 MHz
Common-mode rejection	−30 dB typ.		1 MHz 100 MHz
Operating temperature range	0 °C +70 °C		
Weight	Approx. 11 g		_



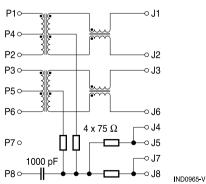
10/100 Base-T, dual port, tab down

Dimensional drawing for B78477P1008A024



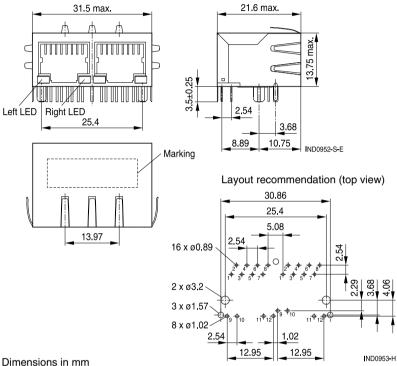
Values without tolerances are nominal values for reference.

Pinning



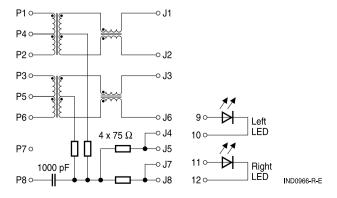
10/100 Base-T, dual port, tab down

Dimensional drawing for B78477P1009A124



Values without tolerances are nominal values for reference.

Pinning





RJ45 Jacks with integrated magnetics

B78477P100*A*24

10/100 Base-T, dual port, tab down

Cautions and warnings

- 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. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
- 2. We also point out that in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or lifesaving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
- 3. The warnings, cautions and product-specific notes must be observed.
- 4. In order to satisfy certain technical requirements, some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous). Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
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