

Inductors B82559\*A013

### **Helically wound power inductors**

**HPI 13** 

# Rated inductance 0.5 to 3.9 $\mu$ H Rated current 10 to 25 A

#### Construction

- Ferrite core
- Magnetically shielded
- Winding: enamel copper flat wire
- Self-leaded construction under body termination

#### **Features**

- Very high rated current
- Extremely low DC resistance
- Very low profile and smallest possible footprint
- Suitable for pick and place processes

#### **Applications**

- Energy storage chokes for
  - DC/DC converters
  - VRM modules
  - POL converters

#### **Terminals**

■ Pure tin (Pb-free)

#### Marking

EPCOS. ordering code, inductance, date of manufacture (coded)

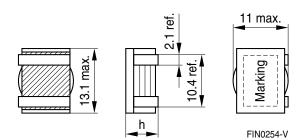
#### Delivery mode and packing unit

Blister tape 24 mm, reel 330 mm dia.

4.95 mm height = 750 pcs./reel

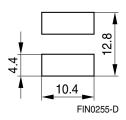
5.95 mm height = 550 pcs./reel

#### **Dimensional drawing**



# 00 112 A0 13 1,1 / AH 3604

#### **Recommended PCB layout**





Inductors B82559\*A013

## **Helically wound power inductors**

**HPI 13** 



#### General technical data and measuring conditions

Rated inductance L <sub>R</sub>	Measured with Wayne-Kerr 3260A/3265B, measuring voltage 100 mV		
Inductance tolerance	±10%		
Saturation current I <sub>sat</sub>	Current that will result in approx. 20% drop in inductance value.		
	Temperature response needs to be verified in specific applications. Test results on request.		
DC resistance	Measured at 20 °C ambient temperature		
Solderability	235 °C, 5 s, wetting >90%		
Operating temperature	−40 +130 °C		
Weight	2.2 g (height = 4.95 mm), 2.6 g (height = 5.95 mm)		

#### **Characteristics and ordering codes**

L <sub>R</sub>	I <sub>sat</sub>	R <sub>max</sub>	Height h	Ordering code
μΗ	Α	mΩ	mm	
0.50	30	1.1	4.95	B82559A0501A013
0.95	25	1.4	5.95	B82559A0951A013
1.1	20	2.2	4.95	B82559A0112A013
1.4	22	1.8	5.95	B82559A0142A013
2.2	15	4.2	4.95	B82559A0222A013
2.4	16.5	3.2	5.95	B82559A0242A013
3.0	13	5.1	4.95	B82559A0302A013
3.9	12	6.0	5.95	B82559A0392A013

#### **Published by EPCOS AG**

# 

© EPCOS AG 2004. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.