



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-led 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)

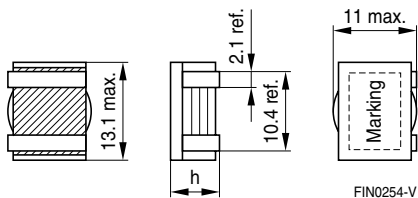
**Delivery mode and packing unit**

Blister tape 24 mm, reel 330 mm dia.

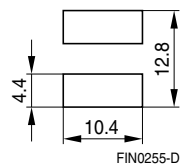
4.95 mm height = 750 pcs./reel

5.95 mm height = 550 pcs./reel

**Dimensional drawing**



**Recommended PCB layout**





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**General technical data and measuring conditions**

Rated inductance $L_R$	Measured with Wayne-Kerr 3260A/3265B, measuring voltage 100 mV
Inductance tolerance	±10%
Saturation current $I_{sat}$	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**

$L_R$	$I_{sat}$	$R_{max}$	Height h	Ordering code
μH	A	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

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