SMT power inductors

Size 12 x 12 mm

Series/Type:	**B82477G2**
Date:	January 2006
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SMD

Size 12x12 mm
Rated inductance 1,0..1000 µH

Construction

- Ferrite core
- Magnetically shielded
- Winding: enamel copper wire
- Winding soldered to terminals

Features

- Wide temperature range
- Very high rated current
- Low DC resistance
- Suitable for reflow soldering

Applications

- Filtering of supply voltages
- Coupling, decoupling
- DC/DC converters
- Automotive electronics

Terminals

- Tinned

Marking

Marking on component:
Manufacturer
L value (in µH)
Date code

Minimum marking on reel:
Manufacturer, part number, ordering code,
L value and tolerance
quantity, date of packing

Delivery mode

Blister tape 24mm, reel packing ∅ 330mm
packaging quantity 600 pcs/reel

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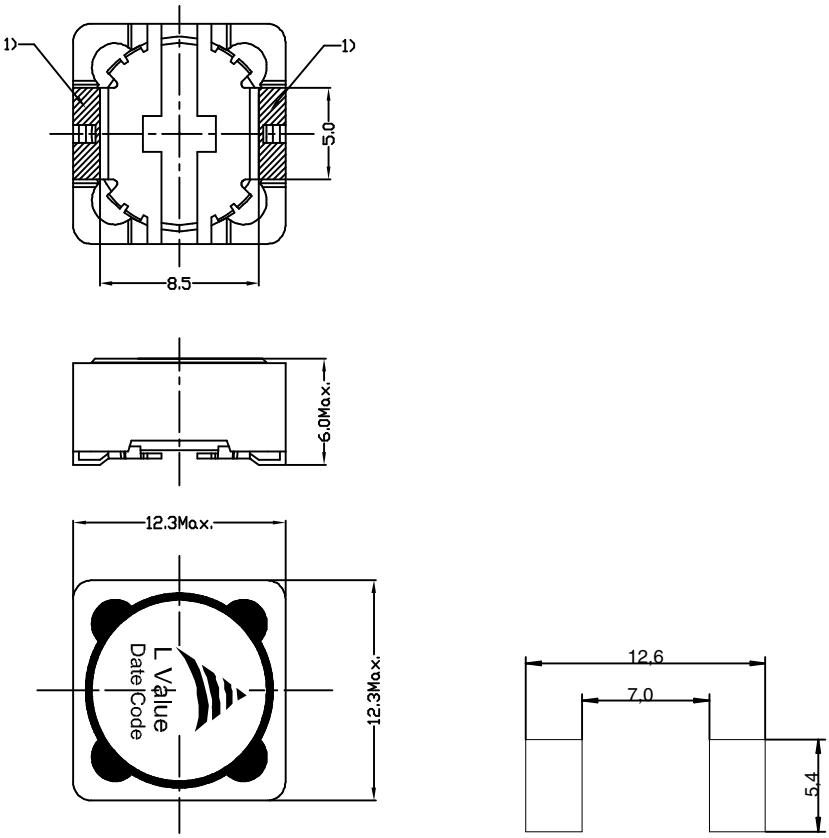
General technical data

Rated inductance L_R	Measured with HP 4284A, measuring voltage 100 mV
DC resistance R_{max}	Measured at 20 °C ambient temperature
Rated current I_R	Maximum permissible DC with temperature increase of ≤ 40 K at ambient temperature of 85 °C or inductance decrease $\Delta L/L_0 \approx 25\%$ whichever is less
Climatic category	In accordance with IEC 60068–1 55/125/56 (–55 °C/ +125 °C/ 56 days damp heat test)
Solderability	5s, 235°C, wetting > 90%
Weight	Approx. 4g

Dimensional drawing and layout recommendation



1) Soldering area

tolerances +/– 0,2 mm unless otherwise noted

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Characteristics and ordering code

L_R µH	f_L kHz	Tolerance	I_R A	R_{max} Ω	Ordering code
1,0	1	20 %	9,00	0,009	B82477G2102M000
1,3	1	20 %	8,70	0,010	B82477G2132M000
2,2	1	20 %	7,00	0,014	B82477G2222M000
3,3	1	20 %	6,00	0,017	B82477G2332M000
4,7	1	20 %	5,00	0,020	B82477G2472M000
6,8	1	20 %	4,40	0,022	B82477G2682M000
7,5	1	20 %	4,20	0,023	B82477G2752M000
10	1	20 %	4,00	0,025	B82477G2103M000
12	1	20 %	3,50	0,027	B82477G2123M000
15	1	20 %	3,30	0,030	B82477G2153M000
22	1	20 %	2,80	0,036	B82477G2223M000
33	1	20 %	2,10	0,057	B82477G2333M000
47	1	20 %	1,80	0,075	B82477G2473M000
68	1	20 %	1,50	0,120	B82477G2683M000
100	1	20 %	1,30	0,160	B82477G2104M000
150	1	20 %	1,00	0,230	B82477G2154M000
220	1	20 %	0,80	0,400	B82477G2224M000
330	1	20 %	0,68	0,510	B82477G2334M000
470	1	20 %	0,58	0,770	B82477G2474M000
680	1	20 %	0,48	1,200	B82477G2684M000
1000	1	20 %	0,40	1,530	B82477G2105M000

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