

High-current version

Size 1812 (EIA) or 4532 (IEC)

Rated inductance 1,0 to 330 μH

Rated current 110 to 1100 mA



Construction

- Ferrite core
- US-welded winding
- Flame-retardant encapsulation

Features

- High resonance frequency
- Suitable for reflow (IR and vapor phase) and wave soldering

Applications

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

Terminals

- Silver-plated
- 1–2 μm Cu, 4–6 μm Ag
- Base material CuSn6
- Suitable for soldering and conductive adhesion
- No leaching during wave soldering

Marking

Marking on component:

Manufacturer and series mark »–H«

L value (in nH) and tolerance of L value (coded),
date of manufacture (coded)

Minimum data on reel:

Manufacturer, part number, ordering code,
 L value and tolerance of L value,
quantity, date of packing

Delivery mode

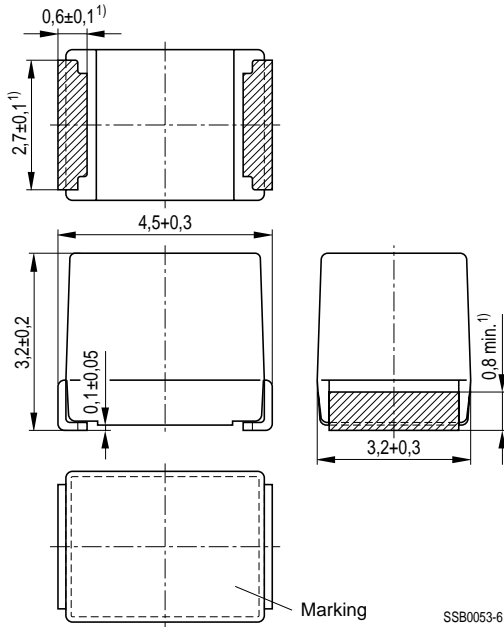
12-mm blister tape, wound on 330-mm \varnothing reel

For details on taping, packing and packing units [see page 153](#)

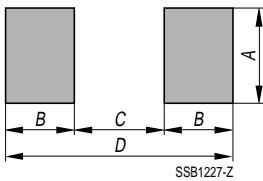
General technical data

Rated inductance L_R	Measured with impedance analyzer HP 4194A at frequency f_L
Q factor Q_{\min}	Measured with impedance analyzer HP 4194A at frequency f_Q
Rated current I_R	Maximum permissible dc with inductance decrease $\Delta L/L_0 \leq 10\%$ and temperature increase of $\leq 40\text{ K}$ at rated temperature of 85°C
Self-resonance frequency $f_{\text{res, min}}$	Measured with network analyzer HP 8753
DC resistance R_{\max}	Measured at 20°C ambient temperature, measuring current $< I_R$
Climatic category	In accordance with IEC 60068-1 55/125/56 ($-55^\circ\text{C}/+125^\circ\text{C}/56$ days damp heat test)
Solderability	In accordance with IEC 60062-2-58 (215 ± 3) $^\circ\text{C}$, ($3 \pm 0,3$) s Wetting of soldering area: $\geq 95\%$
Resistance to soldering heat	In accordance with IEC 60068-2-20 260°C , 10 s $\Delta L/L \leq \pm 3\%$
Permissible PCB bending	2 mm (100 mm long standard PCB)
Weight	Approx. 130 mg

Dimensional drawing



Layout recommendation



Dimensions (mm)	A	B	C	D
Wave soldering	3,1	1,7	3,2	6,6
Reflow soldering	3,6	1,3	3,2	5,8

1) Soldering area, silver-plated

Characteristics and ordering codes

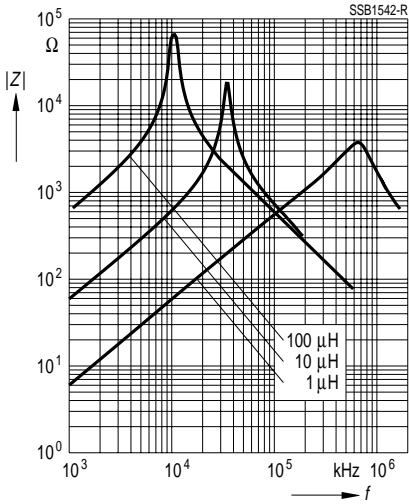
$L_R^{1)}$ μH	Tolerance	f_L MHz	Q_{\min}	f_Q MHz	I_R mA	R_{\max} Ω	$f_{\text{res, min}}$ MHz	Ordering code
1,0	$\pm 10\%$ $\triangleq K$	1	20	7,96	1100	0,11	260	B82432-H1102-K
1,5		1	20	7,96	1000	0,14	175	B82432-H1152-K
2,2		1	20	7,96	900	0,18	95	B82432-H1222-K
3,3		1	20	7,96	820	0,22	80	B82432-H1332-K
4,7		1	20	7,96	740	0,27	40	B82432-H1472-K
6,8		1	20	7,96	660	0,35	36	B82432-H1682-K
10		1	25	2,52	600	0,50	25	B82432-H1103-K
15		0,1	25	2,52	480	0,70	20	B82432-H1153-K
22		0,1	25	2,52	430	0,90	18	B82432-H1223-K
33		0,1	25	2,52	350	1,4	15	B82432-H1333-K
47		0,1	25	2,52	310	1,9	11,5	B82432-H1473-K
68		0,1	25	2,52	230	2,6	10,0	B82432-H1683-K
100		0,1	25	0,796	180	4,0	8,0	B82432-H1104-K
150		0,1	25	0,796	150	6,1	6,5	B82432-H1154-K
220		0,1	25	0,796	130	7,5	4,5	B82432-H1224-K
330	0,1	25	0,796	110	11,0	3,5	B82432-H1334-K	

1) Further E 12 ratings upon request.

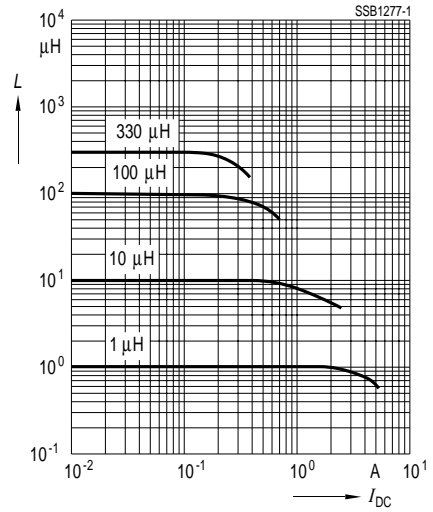
SIMID 1812-H



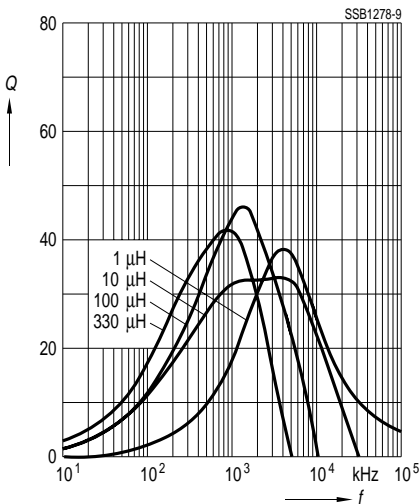
Impedance $|Z|$
versus frequency f
measured with impedance analyzer
HP 4291A



Inductance L
versus dc load current I_{DC}
measured with LCR meter
HP 4275A



Q factor versus frequency f
measured with impedance analyzer
HP 4194A



Current derating I_{op}/I_R
versus ambient temperature T_A

