

EMI SUPPRESSION CHOKES

SIMID 03

B 82432

Chip inductors for surface mounting (SMD)

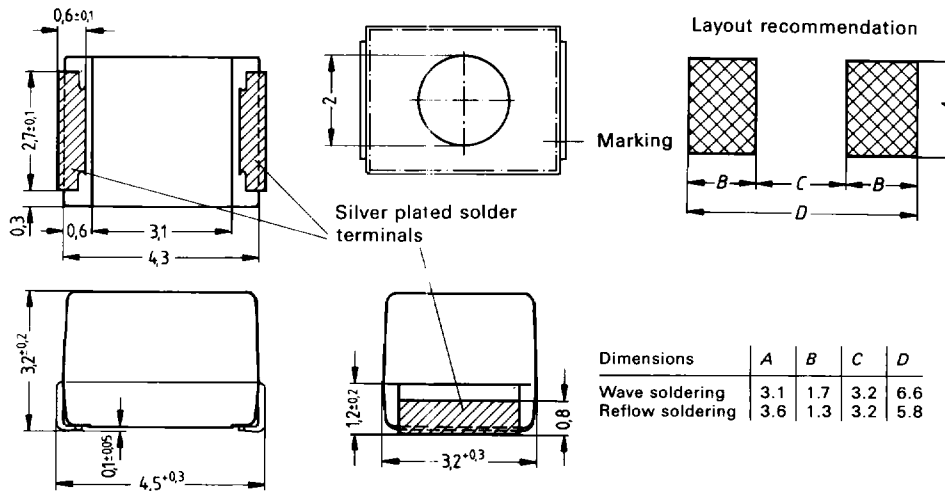
Rated current 0.055 to 0.6 A

SIMID 03 series (Siemens Miniature Inductors)

Miniature chip chokes, encapsulated (flame-retardant), with high-temperature-resistant copper winding and a cube-shaped core made of ferrite. The winding is lacquer-coated and the wire ends are welded to contact elements (CuSn6) at the face ends of the inductor, with the welded joints being protected by an epoxy resin adhesive.

Chip chokes are intended for automatic placement and all soldering methods.

Due to their special design they are particularly suitable for use in RF circuits such as tuners in car radios, TV sets and video recorders or for application in mobile phones and antenna amplifiers.



Technical data

Dimensions $l \times w \times h$ (mm)
size as per EIA

$4.5 \times 3.2 \times 3.2$
1812

Rated inductance

1 μ H to 1000 μ H
Measuring frequency 1 MHz for $L \leq 10 \mu$ H
100 kHz for $L > 10 \mu$ H

Rated current

referred to 40 °C ambient temperature

DC resistance

measured at 20 °C

Quality

measured with impedance analyzer HP 4194 A

Resonant frequency

measured with scalar network analyzer ZAS by Rohde & Schwarz

DIN climatic category
(DIN 40 040)

FKE (-55 °C to +125 °C, humidity category E)

IEC climatic category (IEC 68)

55/125/56

Permissible soldering methods

Wave soldering, vapor phase soldering and other reflow methods

Solderability

215 °C \pm 3 °C, 3 \pm 0.3 s

> 95 % wetting of solder terminals

Resistance to soldering heat
complies with test Tb,
DIN IEC 68-2-20

260 °C, 10 s

Permissible bending of PC board

2 mm (standard PC board, 100 mm in length)

Marking on component

Inductance and tolerance
(correspond to the last four digits
of the ordering code)

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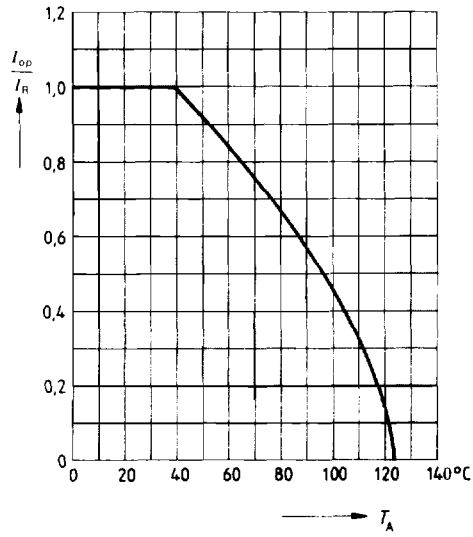
Inductance L μH	Tolerance	Quality at measuring frequency		Rated-current I_R mA	DC resistance R_{max} Ω	Resonant frequency f_{min} MHz	Ordering code PU 2500
		Q_{min}	MHz				
1.0	$\pm 20\%$ \triangleq "M"	25	7.96	600	0.28	260	B82432-A1102-M
1.2		25	7.96	560	0.32	250	B82432-A1122-M
1.5		25	7.96	535	0.35	230	B82432-A1152-M
1.8		25	7.96	490	0.41	210	B82432-A1182-M
2.2		30	7.96	480	0.43	190	B82432-A1222-M
2.7		30	7.96	450	0.49	170	B82432-A1272-M
3.3		30	7.96	425	0.55	155	B82432-A1332-M
3.9		30	7.96	410	0.59	145	B82432-A1392-M
4.7		30	7.96	390	0.65	110	B82432-A1472-M
5.6		30	7.96	375	0.71	100	B82432-A1562-M
6.8		30	7.96	360	0.78	75	B82432-A1682-M
8.2		30	7.96	330	0.92	23	B82432-A1822-M
10.0		$\pm 10\%$ \triangleq "K" or $\pm 20\%$ \triangleq "M"	45	2.52	320	0.98	22
12.0	45		2.52	300	1.10	19	B82432-A1123-*
15.0	45		2.52	280	1.25	17	B82432-A1153-*
18.0	45		2.52	270	1.35	15	B82432-A1183-*
22.0	45		2.52	260	1.45	13	B82432-A1223-*
27.0	45		2.52	245	1.65	12	B82432-A1273-*
33.0	45		2.52	230	1.85	10.5	B82432-A1333-*
39.0	45		2.52	220	2.05	10.0	B82432-A1393-*
47.0	40		2.52	210	2.3	9.5	B82432-A1473-*
56.0	40		2.52	200	2.5	9.0	B82432-A1563-*
68.0	40		2.52	190	2.8	8.0	B82432-A1683-*
82.0	35		2.52	175	3.2	7.0	B82432-A1823-*
100.0	40		2.52	145	4.7	6.5	B82432-A1104-*
120.0	35		0.796	140	5.2	6.0	B82432-A1124-*
150.0	35		0.796	130	6.1	5.5	B82432-A1154-*
180.0	35		0.796	120	6.9	5.0	B82432-A1184-*
220.0	30		0.796	115	7.5	4.6	B82432-A1224-*
270.0	30		0.796	90	12.5	4.4	B82432-A1274-*
330.0	30		0.796	85	14.1	4.1	B82432-A1334-*
390.0	35		0.796	80	15.3	3.8	B82432-A1394-*
470.0	35		0.796	75	17.5	3.5	B82432-A1474-*
560.0	30		0.796	70	23.0	2.8	B82432-A1564-*
680.0	30		0.796	65	25.0	2.6	B82432-A1684-*
820.0	30	0.796	60	28.0	2.5	B82432-A1824-*	
1000.0	30	0.796	55	31.0	2.3	B82432-A1105-*	

* Replace the asterisk by the code letter for tolerance "K" $\triangleq \pm 10\%$ or "M" $\triangleq \pm 20\%$.

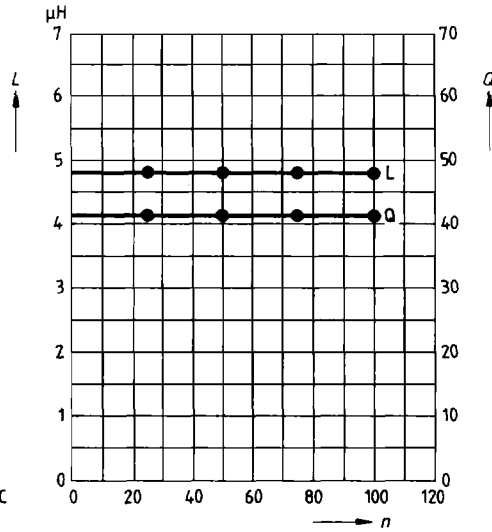
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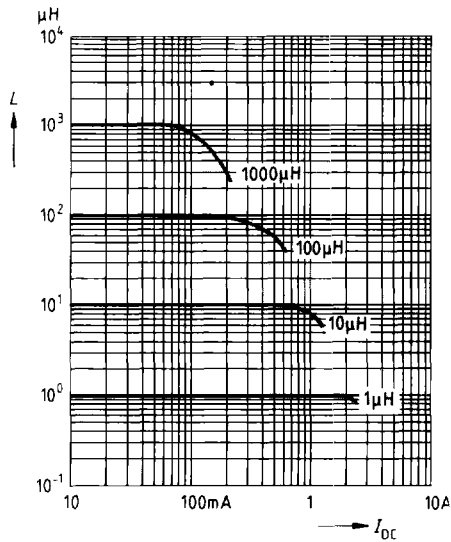
Current handling capability I_{op}/I_R
versus ambient temperature T_A



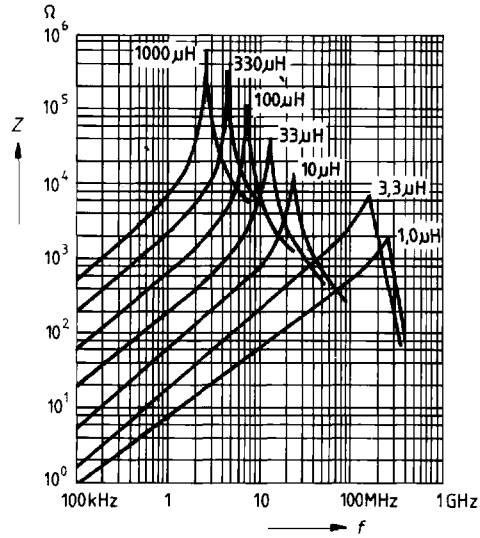
Inductance L and Q -factor
versus number n of dip soldering
procedures (240 °C, 5 s)



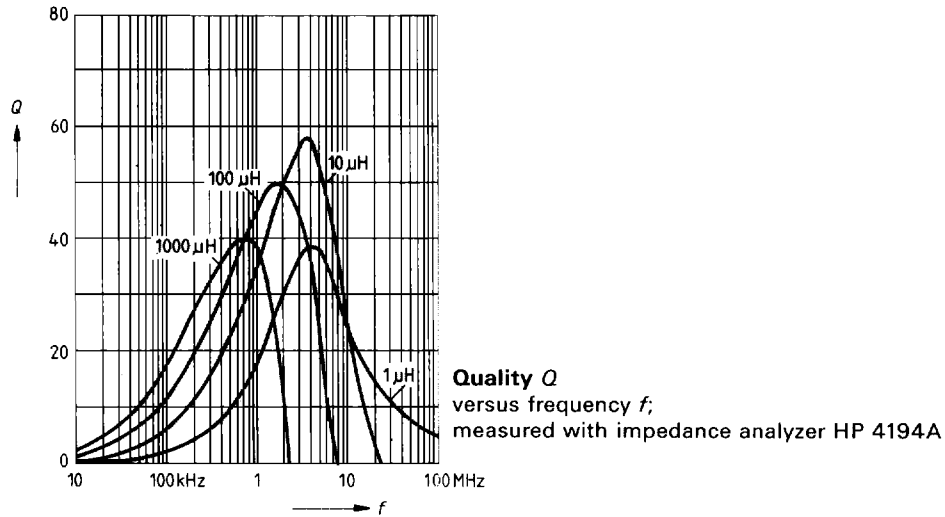
Inductance L
versus DC capability I_{DC}
measured with LCR meter HP 4275A



Impedance Z
versus frequency f ;
measured with vector analyzer ZPV

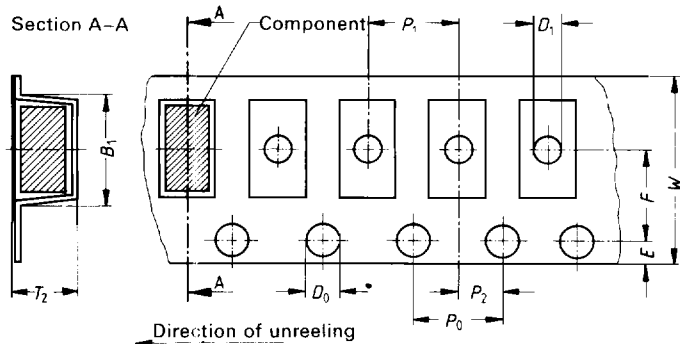


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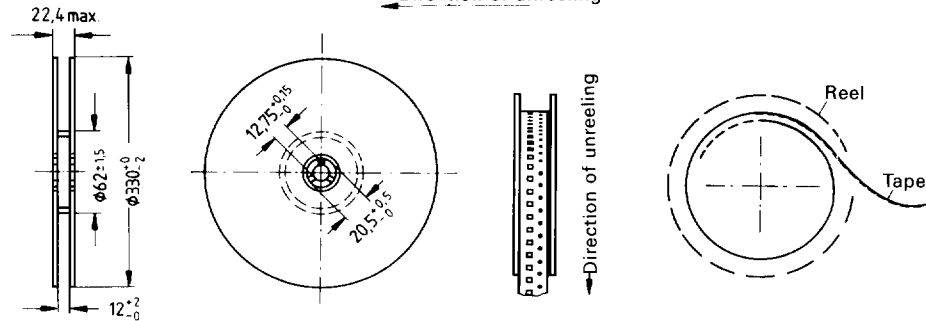


Tape packaging in accordance with IEC 286-3

Dimensions	mm
W	12 ± 0.3
P_0	4 ± 0.1
D_0	1.5 ± 0.1
E	1.75 ± 0.1
F	5.5 ± 0.05
P_2	2 ± 0.05
P_1	8 ± 0.1
D_1	1.5 ± 0.2
T_2	≤ 4.1
B_1	≤ 5.9



Packing



Marking: Inductance and tolerance \pm last 4 digits of ordering code