



SMT Inductors, SIMID Series

B82498-A

SIMID 0805-A

SMD



Size 0805 (EIA) and/or 2012 (IEC)
Rated inductance 10 to 1000 nH
Rated current 120 to 540 mA

Construction

- Core: liquid crystal polymer (LCP)
- Molded epoxy encapsulation
- Winding: enamel copper wire, soldered

Features

- High mechanical stability
- Suitable for reflow (IR and vapor phase) and wave soldering

Applications

- Entertainment electronics
(video cameras, photo cameras)

Terminals

- Electro-plated
- 0,5 μm Ag; $\geq 5 \mu\text{m}$ Sn60Pb40
- Base material phosphor bronze

Marking

No marking on component

Minimum data on reel:

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

Delivery mode

8-mm blister tape, wound on 178-mm \varnothing reel

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



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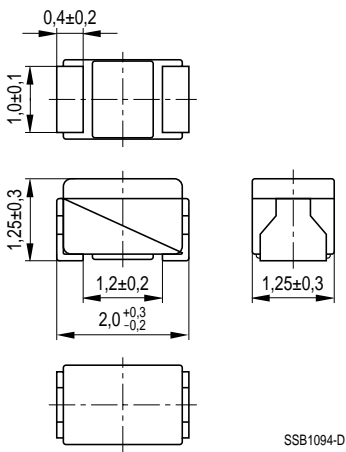


General technical data

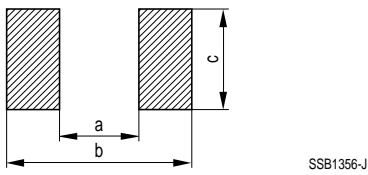
Rated inductance L_R	Measured with impedance analyzer HP 4191 at frequency f_L
Q factor Q_{min} , Q_{typ}	Measured with impedance analyzer HP 4191A, Q_{min} measured at frequency f_Q
Rated current I_R	Maximum permissible dc with a temperature increase of ≤ 20 K at rated temperature of 85°C
Self-resonance frequency $f_{res, min}$	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 20/085/56 (– 20°C/+ 85°C/56 days damp heat test)
Solderability	In accordance with IEC 60062-2-58 (230 ± 5)°C, (3 ± 0,5) s Wetting of soldering area: ≥ 90 %
Resistance to soldering heat	In accordance with IEC 60068-2-20 260°C, 10 s $\Delta L/L \leq \pm 5$ %; $\Delta Q/Q \leq \pm 20$ %
Permissible PCB bending	2 mm (100 mm long standard PCB)
Weight	Approx. 8,5 mg



Dimensional drawing



Layout recommendation



Dimensions (mm)

a	b	c
1,1 ± 0,1	3,4 ± 0,4	1,1 ± 0,2



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Characteristics and ordering codes

L_R nH	Tolerance	Q_{min}	Q_{typ} (at 800 MHz)	$f_L; f_Q$ MHz	I_R mA	R_{max} Ω	$f_{res, min}$ MHz	Ordering code ¹⁾	
10	$\pm 10\%$ $\triangleq K$	10	60	100	540	0,18	3300	B82498-A3100-K	
12		10	56	100	535	0,24	3300	B82498-A3120-K	
15		12	58	100	520	0,24	3000	B82498-A3150-K	
18		12	62	100	480	0,29	3000	B82498-A3180-K	
22		15	61	100	465	0,29	2600	B82498-A3220-K	
27		15	65	100	455	0,34	2500	B82498-A3270-K	
33		$\pm 5\%$ $\triangleq J$	15	67	100	395	0,39	2050	B82498-A3330-+
39	15		66	100	390	0,41	2000	B82498-A3390-+	
47	$\pm 10\%$ $\triangleq K$		15	58	100	385	0,46	1650	B82498-A3470-+
56			15	53	100	360	0,51	1550	B82498-A3560-+
68	15		52	100	340	0,57	1450	B82498-A3680-+	
82	15		49	100	330	0,63	1100	B82498-A3820-+	
100	8		—	25,2	285	0,86	800	B82498-A3101-+	
120	8		—	25,2	275	0,99	600	B82498-A3121-+	
150	10		—	25,2	230	1,47	600	B82498-A3151-+	
180	10		—	25,2	195	1,61	600	B82498-A3181-+	
220	10	—	25,2	170	1,84	500	B82498-A3221-+		
270	10	—	25,2	165	1,95	300	B82498-A3271-+		
330	$\pm 10\%$ $\triangleq K$	10	—	25,2	160	2,16	200	B82498-A3331-+	
390		10	—	25,2	150	2,37	150	B82498-A3391-+	
470		10	—	25,2	145	2,56	150	B82498-A3471-+	
560		10	—	25,2	140	2,69	100	B82498-A3561-+	
680		10	—	25,2	130	3,02	100	B82498-A3681-+	
820		10	—	25,2	125	3,38	80	B82498-A3821-+	
1000		8	—	7,96	120	3,88	80	B82498-A3102-+	

1) Replace the + by the code letter for the required inductance tolerance (see table).