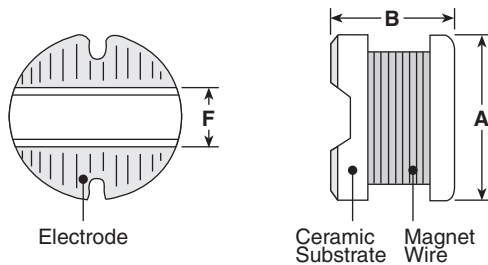




### features

- Suitable for reflow soldering
- High current capability up to 2 Amps
- Low DCR
- Marking: Black body color with black marking
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

### dimensions and construction



Size	Dimensions inches (mm)		
	A	B	F (typ.)
0604	.220±.008 (5.6±0.2)	.177±.012 (4.5±0.3)	.071 (1.8)
0805	.295±.012 (7.5±0.3)	.197±.012 (5.0±0.3)	.102 (2.6)
1006	.374±.012 (9.5±0.3)	.217±.012 (5.5±0.3)	.114 (2.9)

### ordering information

New Part #	<b>SDR</b>	<b>0805</b>	<b>T</b>	<b>TEB</b>	<b>100</b>	<b>M</b>
	Type	Size	Termination Material	Packaging	Nominal Inductance	Tolerance
		0604 0805 1006	T: Sn	TEB: 13" embossed plastic (0604: 1,500 pieces/reel) (0805: 1,000 pieces/reel) (1006: 800 pieces/reel)	100: 10µH 101: 100µH	K: ±10% M: ±20% Y: ±15%

### applications and ratings

Part Designation	Nominal Inductance L (µH) @ 1KHz	Inductance Tolerance	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (Amps)	Operating Temperature Range	Storage Temperature Range
SDR0604TTEB3R3M	3.3	M: ±20%	0.06	2.0	-20°C to +80°C	-40°C to +125°C
SDR0604TTEB3R9M	3.9		0.07	1.9		
SDR0604TTEB4R7M	4.7		0.07	1.8		
SDR0604TTEB5R6M	5.6		0.08	1.7		
SDR0604TTEB6R8M	6.8		0.08	1.6		
SDR0604TTEB8R2M	8.2		0.09	1.5		
SDR0604TTEB100M	10		0.10	1.45		
SDR0604TTEB120M	12	Y: ±15%	0.12	1.4		
SDR0604TTEB150Y	15		0.14	1.3		
SDR0604TTEB180Y	18		0.15	1.25		
SDR0604TTEB220Y	22		0.19	1.1		
SDR0604TTEB270Y	27		0.22	1.0		

For further information on packaging, please refer to Appendix A.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

11/23/08

**applications and ratings (continued)**

Part Designation	Nominal Inductance L (μH) @ 1KHz	Inductance Tolerance	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (Amps)	Operating Temperature Range	Storage Temperature Range
SDR0604TTEB330K	33	K: ±10%	0.25	0.88	-20°C to +80°C	-40°C to +125°C
SDR0604TTEB390K	39		0.32	0.80		
SDR0604TTEB470K	47		0.37	0.72		
SDR0604TTEB560K	56		0.42	0.68		
SDR0604TTEB680K	68		0.52	0.62		
SDR0604TTEB820K	82		0.60	0.58		
SDR0604TTEB101K	100		0.70	0.52		
SDR0604TTEB121K	120		0.93	0.48		
SDR0604TTEB151K	150		1.10	0.40		
SDR0604TTEB181K	180		1.38	0.38		
SDR0604TTEB221K	220		1.57	0.35		
SDR0805TTEB100M	10		M: ±20%	0.07		
SDR0805TTEB120M	12	0.08		2.0		
SDR0805TTEB150M	15	0.09		1.8		
SDR0805TTEB180M	18	0.10		1.6		
SDR0805TTEB220M	22	0.11		1.5		
SDR0805TTEB270M	27	0.12		1.3		
SDR0805TTEB330K	33	0.14		1.2		
SDR0805TTEB390K	39	0.16		1.1		
SDR0805TTEB470K	47	0.20		1.0		
SDR0805TTEB560K	56	0.24		0.94		
SDR0805TTEB680K	68	0.30		0.85		
SDR0805TTEB820K	82	0.37		0.78		
SDR0805TTEB101K	100	0.45	0.72			
SDR0805TTEB121K	120	0.48	0.66			
SDR0805TTEB151K	150	0.68	0.58			
SDR0805TTEB181K	180	0.77	0.51			
SDR0805TTEB221K	220	0.96	0.49			
SDR0805TTEB271K	270	1.11	0.42			
SDR0805TTEB331K	330	1.26	0.40			
SDR0805TTEB391K	390	1.77	0.36			
SDR0805TTEB471K	470	1.96	0.34			
SDR1006TTEB100M	10	M: ±20%	0.06	2.60	-20°C to +80°C	-40°C to +105°C
SDR1006TTEB120M	12		0.07	2.45		
SDR1006TTEB150M	15		0.08	2.25		
SDR1006TTEB180M	18		0.09	2.15		
SDR1006TTEB220M	22		0.10	1.95		
SDR1006TTEB270M	27		0.11	1.75		
SDR1006TTEB330K	33	K: ±10%	0.12	1.50		
SDR1006TTEB390K	39		0.14	1.35		
SDR1006TTEB470K	47		0.17	1.25		
SDR1006TTEB560K	56		0.19	1.15		
SDR1006TTEB680K	68		0.22	1.10		
SDR1006TTEB820K	82		0.25	1.00		
SDR1006TTEB101K	100		0.35	0.97		
SDR1006TTEB121K	120		0.40	0.89		
SDR1006TTEB151K	150		0.47	0.78		
SDR1006TTEB181K	180		0.63	0.72		
SDR1006TTEB221K	220		0.73	0.66		

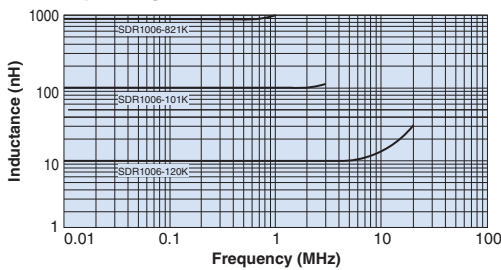
Inductors

**applications and ratings (continued)**

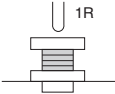
Part Designation	Nominal Inductance L (μH) @ 1KHz	Inductance Tolerance	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (Amps)	Operating Temperature Range	Storage Temperature Range
SDR1006TTEB271K	270	K: ±10%	0.97	0.57	-20°C to +80°C	-40°C to +105°C
SDR1006TTEB331K	330		1.15	0.52		
SDR1006TTEB391K	390		1.30	0.48		
SDR1006TTEB471K	470		1.48	0.42		
SDR1006TTEB561K	560		1.90	0.33		
SDR1006TTEB681K	680		2.25	0.28		
SDR1006TTEB821K	820		2.55	0.24		

**environmental applications**

**L-Frequency Characteristics**



**Performance Characteristics**

Parameter	Maximum Δ L	Test Method
Body Strength	No damage	Load 1 kg. for 10 seconds  R: The top of load stock L: Slot width SDR0805: 1.57" (4.0mm) SDR1006: .236" (6.0mm)
Resistance to Vibration	Change of inductance: ±5%	To put the sample on paper phenolic resin laminate base and to vibrate at the frequency of 10 - 55 - 10 Hz for each X, Y, Z direction for 2 hours and to sweep it at a full vibration width of .059" (1.5mm) for 1 minute
Resistance to Soldering	No remarkable visual damage	To immerse into solder bath @ 260°C ± 5°C for 10 seconds ± 1 second
Solderability	The electrode shall be covered with new solder	To immerse in solder bath @ 235°C ± 5°C for 3 seconds ± 0.5 second
Resistance to Cold	Change of inductance: ±10%	To leave in a bath @ -40°C ± 2°C for 1000 hours
Temperature Cycling	Change of inductance: ±10%	To keep @ -25°C to +85°C for 30 minutes in 5 cycles and leave for 1 - 15 minutes in normal temperature at the time of transition between low temperatures and high temperatures
Resistance to Heat	Change of inductance: ±10%	To leave in a bath @ 85°C ± 2°C for 2 hours (Resistance to heat of ferrite core: 120°C)
T.C.R.	Change of inductance: ±5%	20°C shall be standard and change of inductance shall be measured @ -25°C to +85°C
Resistance to Damp (Steady State)	Change of inductance: ±10%	60°C ± 2°C, 90 - 95% RH, 1000 hours
Endurance (Under Damp and Load)	Change of inductance: ±10%	40°C ± 2°C, 90 - 95% RH
Endurance (Under High Temperature)	Change of inductance: ±10%	85°C ± 2°C, supply allowable current for 1000 hours