

**MOLDED CHIP INDUCTOR
SERIES IC1812**

FEATURES

- Highly reliable in environments of sudden temperature changes and humidity
- Large electrodes and strong terminals allow more secure bonding to solder pads
- Good for flow, reflow soldering, or soldering irons

ELECTRICAL CHARACTERISTICS

- Inductance range 0.10μH to 1000μH
- Tolerance ± 20% for values under 1.0μH
 ± 10% for values at or above 1.0μH
 Special tolerances are available on special order.
- Rated current Based on current flow and temperature rise of 20°C max.
- Test procedure L & Q are measured with HP-4191A & HP-4192A
- *Suffix E Identifies parts that will be passed through a second soldering reflow process at 215°C

PHYSICAL CHARACTERISTICS

- Operating temp. -55°C to +105°C
- Construction Wire wound, epoxy molding
- Soldering heat 240°C for 10 seconds resistance
- Solderability Preheat: 120°C for 4 minutes
 Solder temperature 215°C
 Dwelling time: 3 seconds
 95% of terminals are covered with solder
- Terminal Lead frame
- Terminal strength 3 lbs pull test
- Resistance to solvents Conforms to MIL-STD-202E
- Marking On part: Inductance
 On reel: Part number, Quantity, Production date
- Packaging 500 pieces per reel
- Reel specifications 178 mm paper or plastic reel with embossed carrier tape 12 mm width, 4 mm pitch

DIMENSIONS IN MILLIMETERS

- Body length A 4.5 mm ± 0.2 mm
- Body width B 3.2 mm ± 0.2 mm
- Body height C 3.2 mm ± 0.2 mm
- Terminal length D 0.7 mm to 1.3 mm
- Terminal width E 1.1 mm to 1.8 mm

SPECIFICATIONS

Part Number	L (μH)	Tol (%)	Q Min	Test Freq (MHz)	SRF Min (MHz)	DCR Max (Ω)	Rated Current (mA)
IC1812-R10M	0.10	±20	28	25.2	700	0.44	450
IC1812-R12M	0.12		30		500	0.22	450
IC1812-R15M	0.15		30		450	0.25	450
IC1812-R18M	0.18		30		400	0.28	450
IC1812-R22M	0.22		30		350	0.32	450
IC1812-R27M	0.27		30		320	0.36	450
IC1812-R33M	0.33		30		300	0.40	450
IC1812-R39M	0.39		30		350	0.45	450
IC1812-R47M	0.47		30		220	0.50	450
IC1812-R56M	0.56		30		180	0.55	450
IC1812-R68M	0.68		30		160	0.60	450
IC1812-R82M	0.82		30		140	0.67	450
IC1812-1R0K	1.0	±10	50	7.96	100	0.50	450
IC1812-1R2K	1.2		50		80	0.55	430
IC1812-1R5K	1.5		50		70	0.60	410
IC1812-1R8K	1.8		50		60	0.65	390
IC1812-2R2K	2.2		50		55	0.70	380
IC1812-2R7K	2.7		50		50	0.75	370
IC1812-3R3K	3.3		50		45	0.80	355
IC1812-3R9K	3.9		50		40	0.90	330
IC1812-4R7K	4.7		50		35	1.0	315
IC1812-5R6K	5.6		50		33	1.1	300
IC1812-6R8K	6.8		50		27	1.2	285
IC1812-8R2K	8.2		50		25	1.4	270
IC1812-100K	10	50	2.52	20	1.6	250	
IC1812-120K	12	50		18	2.0	225	
IC1812-150K	15	50		17	2.5	200	
IC1812-180K	18	50		15	2.8	190	
IC1812-220K	22	50		13	3.2	180	
IC1812-270K	27	50		12	3.6	170	
IC1812-330K	33	50		11	4.0	160	
IC1812-390K	39	50		10	4.5	150	
IC1812-470K	47	50		10	5.0	140	
IC1812-560K	56	50		9	5.5	135	
IC1812-680K	68	50		9	6.0	130	
IC1812-820K	82	50		8	7.0	120	
IC1812-101K	100	40	0.796	7	8.0	110	
IC1812-121K	120	40		6	8.0	110	
IC1812-151K	150	40		5	9.0	105	
IC1812-181K	180	40		5	9.5	102	
IC1812-221K	220	40		4	10.0	100	
IC1812-271K	270	30		3	18.0	92	
IC1812-271K-E*	270	30		3	18.0	92	
IC1812-331K	330	30		3	20.0	85	
IC1812-391K	390	30		3	23.0	80	
IC1812-471K	470	30		3	26.0	62	
IC1812-561K	560	30		2	30.0	50	
IC1812-681K	680	30		2	40.0	50	
IC1812-821K	820	30	2	45.0	30		
IC1812-102K	1000	30	2	50.0	30		

