

High Current, Surface Mount Inductor



FEATURES

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- 100 % lead (Pb)-free and RoHS compliant


RoHS
COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 H to 1000 μ H, tested at 1.0 Vrms

Inductance Tolerance: 20 %, tighter tolerances available upon request

Operating Temperature: - 40 °C to + 125 °C

Resistance to Solder Heat: 260 °C for 10 seconds

MATERIALS

Core: Ferrite

Wire: Enamelled copper wire Base: LCP

Terminal: Nickel bronze

Adhesive: Epoxy resin

STANDARD ELECTRICAL SPECIFICATIONS					
INDUCTANCE (μ H)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAXIMUM (Ohms)	Isat (Amps)	Irms (Amps)
1.0	$\pm 20\%$	100	0.009	9.0	6.8
1.5	$\pm 20\%$	100	0.010	8.0	6.4
2.2	$\pm 20\%$	100	0.012	7.0	6.1
3.3	$\pm 20\%$	100	0.015	6.4	5.4
4.7	$\pm 20\%$	100	0.018	5.4	4.8
6.8	$\pm 20\%$	100	0.027	4.6	4.4
10	$\pm 20\%$	100	0.038	3.8	3.9
15	$\pm 20\%$	100	0.046	3.0	3.1
22	$\pm 20\%$	100	0.085	2.6	2.7
33	$\pm 20\%$	100	0.10	2.0	2.1
47	$\pm 20\%$	100	0.14	1.6	1.8
68	$\pm 20\%$	100	0.20	1.4	1.5
100	$\pm 20\%$	100	0.28	1.2	1.3
150	$\pm 20\%$	100	0.40	1.0	1.0
220	$\pm 20\%$	100	0.61	0.8	0.8
330	$\pm 20\%$	100	1.02	0.6	0.6
470	$\pm 20\%$	100	1.27	0.5	0.5
680	$\pm 20\%$	100	2.02	0.4	0.4
1000	$\pm 20\%$	100	3.00	0.3	0.3

Inductance drop = 10 % typ. at Isat

 Δ GT = 15°C typ. at Irms

DIMENSIONS in inches [millimeters]								
A (Max.)	B (Max.)	D (Max.)	E	F	G	H	I	J
0.510 [12.95]	0.370 [9.40]	0.205 [5.21]	0.100 [2.54]	0.100 [2.54]	0.300 [7.62]	0.115 [2.92]	0.290 [7.37]	0.110 [2.79]

DESCRIPTION				
IDC-5020 MODEL	10 μH INDUCTANCE VALUE	$\pm 20\%$ INDUCTANCE TOLERANCE	ER PACKAGE CODE	e3 JEDEC LEAD (Pb)-FREE STANDARD
GLOBAL PART NUMBER				
I D C PRODUCT FAMILY	5 0 2 0 SIZE	E R PACKAGE CODE	1 0 0 INDUCTANCE VALUE	M TOL.



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SMD Magnetics Packaging Methods

TAPE AND REEL in inches [millimeters]											
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Tape and Reel</p> <p>User Direction of Feed</p> </div> <div style="text-align: center;"> <p>Carrier Dimensions</p> </div> </div>											
MODEL	PACKAGE CODE			REEL SIZE	CARRIER TAPE WIDTH (W)	COMPONENT PITCH (P)	UNITS/ REEL	PACKAGE CODE			UNITS/ BULK
	PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD (Pb)-FREE					PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD (Pb)-FREE	
IHLP-1616AB-01	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616AB-11	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616BZ-01	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-1616BZ-11	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	4000	-	-	EB	100
IHLP-2525AH	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525BD	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525CZ	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHLP-2525EZ	-	-	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	EB	100
IHLP-4040DZ	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	500	-	-	EB	100
IHLP-5050CE	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	500	-	-	EB	100
IHLP-5050EZ	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	250	-	-	EB	100
IHLP-5050FD	-	-	ER	13	0.945 [24.0]	0.630 [16.0]	250	-	-	EB	100
IHLM-2525CZ	-	-	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	EB	100
IHSM-3825	RC2	RE	ER	13	0.945 [24.0]	0.472 [12.0]	750	P09	PJ	EB	100
IHSM-4825	RC2	RE	ER	13	0.945 [24.0]	0.472 [12.0]	750	P09	PJ	EB	100
IHSM-5832	RC3	RF	ER	13	1.26 [32.0]	0.472 [12.0]	500	P09	PJ	EB	100
IHSM-7832	RC4	RG	ER	13	1.73 [44.0]	0.472 [12.0]	500	P09	PJ	EB	100
IDC-2512	R96	NB	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	-	-
IDC-5020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	-	-
IDC-7328	R96	NB	ER	13	0.945 [24.0]	0.945 [24.0]	250	-	-	-	-
IDCS-2512	R96	NB	ER	13	0.630 [16.0]	0.315 [8.0]	2000	-	-	-	-
IDCS-5020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	500	-	-	-	-
IDCS-7328	R96	NB	ER	13	0.945 [24.0]	0.945 [24.0]	250	-	-	-	-
IDCP-1813	R96	NB	ER	13	0.472 [12.0]	0.315 [8.0]	2000	-	-	-	-
IDCP-2218	R96	NB	ER	13	0.472 [12.0]	0.315 [8.0]	1500	-	-	-	-
IDCP-3114	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
IDCP-3020	R96	NB	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
IDCP-3722	R96	NB	ER	13	0.945 [24.0]	0.472 [12.0]	800	-	-	-	-
IDCP-3916	R96	NB	ER	13	0.945 [24.0]	0.472 [12.0]	800	-	-	-	-
IFC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
IFC-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
IFCB-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IFCB-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	5000	-	-	-	-
ILC-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
ILC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
IMC-0402	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IMC-0402-01	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	10 000	-	-	-	-
IMC-0603	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
IMC-0603-01	-	-	ER	7	0.315 [8.0]	0.079 [2.0]	3000	-	-	-	-
IMC-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
IMC-0805-01	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-



TAPE AND REEL in inches [millimeters]											
MODEL	PACKAGE CODE			REEL SIZE	CARRIER TAPE WIDTH (W)	COMPONENT PITCH (P)	UNITS/ REEL	PACKAGE CODE			UNITS/ BULK
	PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD FREE					PREVIOUS CODE	GLOBAL CODE LEAD BEARING	GLOBAL CODE LEAD FREE	
IMC-1008	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
IMC-1210	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
IMC-1210-100	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
IMC-1812	R73/R92	RV/RX	ER/ET	7	0.472 [12.0]	0.315 [8.0]	500	B13	BN	EB	500
	R13/R91	RQ/RW	ES/EU	13	0.472 [12.0]	0.315 [8.0]	2000				
IMCH-1812	-	-	ER	7	0.472 [12.0]	0.315 [8.0]	500	-	-	-	-
IMC-2220	-	-	ER	13	0.630 [16.0]	0.472 [12.0]	1000	-	-	-	-
ISC-1008	-	-	ER	13	0.472 [12.0]	0.157 [4.0]	750	-	-	-	-
ISC-1210	R98/RB3	SY/AN	ER/ET	7	0.315 [8.0]	0.157 [4.0]	2000	B13	BN	EB	500
	R99/RB4	SZ/R9	ES/EU	13	0.315 [8.0]	0.157 [4.0]	7500				
ISC-1812	R73/R92	RV/RX	ER/ET	7	0.472 [12.0]	0.315 [8.0]	500	B13	BN	EB	500
	R13/R91	RQ/RW	ES/EU	13	0.472 [12.0]	0.315 [8.0]	2000				
ICM-0805	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ICM-1206	-	-	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILSB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILSB-0805 (0.047 - 2.2 μ H)	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILSB-0805 (2.7 - 33 μ H)	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILSB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILBB-0402	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	10 000	-	-	-	-
ILBB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILBB-0805	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
	RT4	ND	ES	13	0.315 [8.0]	0.157 [4.0]	10 000				
ILBB-1210	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILBB-1806	RC8	RK	ER	7	0.472 [12.0]	0.157 [4.0]	2000	-	-	-	-
ILBB-1812	RC8	RK	ER	7	0.472 [12.0]	0.157 [4.0]	1000	-	-	-	-
ILHB-0603	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILHB-0805	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	4000	-	-	-	-
ILHB-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
ILHB-1806	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	2000	-	-	-	-
ILHB-1812	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	1000	-	-	-	-
ILAS-1206	RC8	RK	ER	7	0.315 [8.0]	0.157 [4.0]	3000	-	-	-	-
LPE-3325	R94	RY	ER	13	0.945 [24.0]	0.472 [12.0]	1000	S51	SM	EB	10
LPE-4841	R94	RY	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPE-5047	R94	RY	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPE-6562	R94	RY	ER	13	1.26 [32.0]	0.787 [20.0]	300	S51	SM	EB	10
LPE-6855	R94	RY	ER	13	1.26 [32.0]	0.787 [20.0]	450	S51	SM	EB	10
LPE-3325-CST	-	-	ER	13	0.945 [24.0]	0.472 [12.0]	1000	-	-	EB	10
LPT-3535	RC5	RH	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10
LPT-4545	RC5	RH	ER	13	0.945 [24.0]	0.630 [16.0]	600	S51	SM	EB	10