

POWER SM INDUCTORS, UP TO 20 AMPS SHIELDED AND NON-SHIELDED

HI SERIES



Term.W is
RoHS
compliant &
260°C process
compatible

- High current in small SM package
- Cost effective
- Low DC resistance, high power-to-size ratio

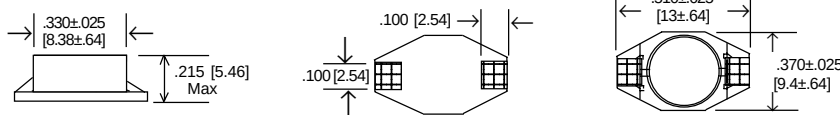
OPTIONS

- Option S: electro-magnetic shield
- Military screening, intermediate values, testing at operating frequency, expanded inductance range, etc.

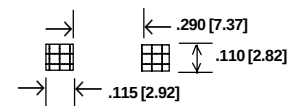


RCD's HI Series represents the ultimate in low cost power inductors. Constructed from high-performance materials optimized for power surface mount applications, and designed to satisfy a wide variety of applications including board mounted DC-DC converters, mini power supplies, voltage multiplying circuits, and a host of power applications where space is at a premium. A wide range of made-to-order sizes are available in shielded and non-shielded versions including super low-profile models (HI330 & HI500 are the most popular sizes).

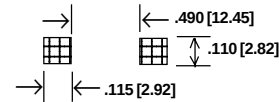
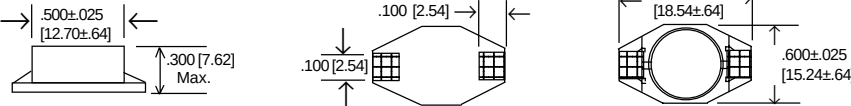
HI330 & HI330S DIMENSIONS



Suggested Mounting



HI500 & HI500S DIMENSIONS



HI330 SPECIFICATIONS

RCD P/N	Inductance (μH)	DCR (Ω , typ)	SRF (MHz typ)	Isat (A)	Irms (A)
HI330-1R0	1.0	.008	130	9.0	6.8
HI330-1R5	1.5	.009	90	8.0	6.4
HI330-2R2	2.2	.010	65	7.0	6.1
HI330-3R3	3.3	.013	50	6.4	5.4
HI330-4R7	4.7	.016	45	5.4	4.8
HI330-6R8	6.8	.019	35	4.6	4.4
HI330-100	10	.025	35	3.8	3.9
HI330-150	15	.040	23	3.0	3.1
HI330-220	22	.050	18	2.6	2.7
HI330-330	33	.088	15	2.0	2.1
HI330-470	47	.12	12	1.6	1.8
HI330-680	68	.16	10	1.4	1.5
HI330-101	100	.23	8	1.2	1.3
HI330-151	150	.33	6	1.0	1.0
HI330-221	220	.53	5	.8	.8
HI330-331	330	.81	4	.6	.6
HI330-471	470	1.1	3.5	.5	.5
HI330-681	680	1.6	3	.4	.4
HI330-102	1000	2.15	2	.3	.3

HI500 SPECIFICATIONS

RCD P/N	Inductance (μH)	DCR (Ω , typ)	SRF (MHz typ)	Isat (A)	Irms (A)
HI500-1R0	1.0	.007	80	20	8.6
HI500-2R2	2.2	.009	80	16	7.1
HI500-3R3	3.3	.011	60	14	6.2
HI500-6R8	6.8	.016	40	12	5.3
HI500-100	10	.025	30	10	4.3
HI500-150	15	.035	22	8	4.0
HI500-220	22	.047	20	7	3.5
HI500-330	33	.066	15	5.5	3.0
HI500-470	47	.086	9	4.5	2.6
HI500-680	68	.13	8	3.5	2.3
HI500-101	100	.19	7	3	1.8
HI500-151	150	.25	6	2.6	1.5
HI500-221	220	.38	5	2.4	1.2
HI500-331	330	.56	4	1.9	1.0
HI500-471	470	.85	3	1.4	.82
HI500-681	680	1.1	2.5	1.2	.72
HI500-102	1000	1.8	2	1.0	.56

HI330S SHIELDED SPECIFICATIONS

RCD P/N	Inductance (μH)	DCR (Ω , typ)	SRF (MHz typ)	Isat (A)	Irms (A)
HI330S-1R0	1.0	.011	140	5.6	5.0
HI330S-1R5	1.5	.016	120	5.2	4.5
HI330S-2R2	2.2	.024	80	5.0	3.8
HI330S-3R3	3.3	.034	70	3.9	3.3
HI330S-4R7	4.7	.044	40	3.2	2.7
HI330S-6R8	6.8	.068	38	2.8	2.2
HI330S-100	10	.091	35	2.4	2.0
HI330S-150	15	.150	25	2.0	1.5
HI330S-220	22	.207	19	1.6	1.3
HI330S-330	33	.334	15	1.4	1.1
HI330S-470	47	.472	13	1.0	0.8

HI500S SHIELDED SPECIFICATIONS

RCD P/N	Inductance (μH)	DCR (Ω , typ)	SRF (MHz typ)	Isat (A)	Irms (A)
HI500S-100	10.0	.040	30	8.0	3.9
HI500S-150	15.0	.048	20	7.0	3.4
HI500S-220	22.0	.059	18	6.0	3.1
HI500S-330	33.0	.075	14	5.0	2.8
HI500S-470	47.0	.097	10	4.0	2.4
HI500S-680	68.0	.138	9	3.0	2.0
HI500S-101	100	.207	7	2.4	1.7
HI500S-151	150	.293	6	2.1	1.3
HI500S-221	220	.470	5	1.9	1.1
HI500S-331	330	.780	4	1.1	0.86
HI500S-471	470	1.08	3	1.1	0.73
HI500S-681	680	1.40	2.5	0.96	0.64
HI500S-102	1000	2.01	2	0.80	0.53

TYPICAL PERFORMANCE CHARACTERISTICS

Temperature Rise	40°C at I _{rms}
Rated Current (Isat)	-10% Typ.
Operating Temp. Range	-40°C to +125°C
Current Derating	2.5%/°C above 85°C
Resistance to Solder Heat	260°C, 10 Seconds
Test Condition	25°C, 100KHz, 0.1Vrms

P/N DESIGNATION:

HI330 ☐ - **101** - **M** **T** **W**
RCD Type ☐
Options: S= Shielded (leave blank if standard)
3-Digit Inductance Value Code: (2 signif. digits & multiplier) 1R0= 1μH, 100=10μH, 101=100μH, 102=1000μH
Tolerance: M=20%, K=10%
Packaging: B=Bulk, T=Tape & Reel
Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable)