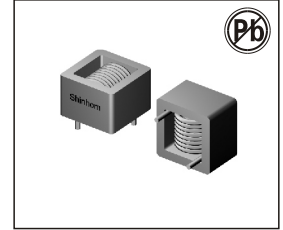


NO-BOARD TYPE HIGH CURRENT POWER INDUCTORS HR1312 SERIES



FEATURES:

- Shielded Construction.
- Lowest DCR/ μ H, in this package size.
- Handles High Transient Current Spikes Without Saturation.
- The Products Contain no Lead and also Support Lead-free Soldering.

COMMON APPLICATIONS:

- Power Line Filter for DC-DC Converter.
- Switching Power Supplier.
- Personal Computers and Other handheld Electronic Equipment.

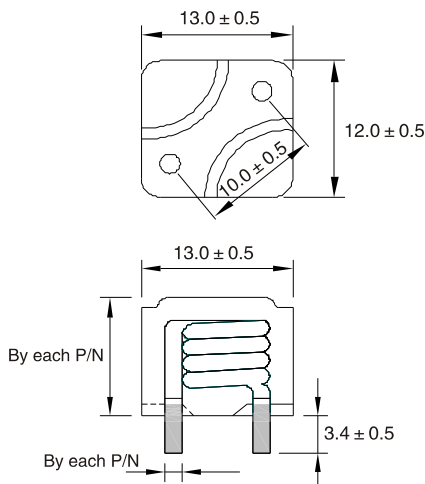
ELECTRICAL CHARACTERISTICS:

Part Number	L(OA) μ H \pm 20%	C (mm)Max	D (mm) \pm 0.1	DCR(m Ω)		I _{rms} (A) Typ	I _{sat} (A) Typ
				Typ	Max		
HR1312-R22M	0.22	9	1.7	0.40	0.55	45	60
HR1312-R30M	0.30	9	1.7	0.55	0.70	40	60
HR1312-R33M	0.33	9	1.7	0.55	0.70	40	60
HR1312-R39M	0.39	9	1.7	0.55	0.70	40	60
HR1312-R47M	0.47	10	1.7	0.70	0.80	40	60
HR1312-R50M	0.50	10	1.7	0.70	0.80	40	60
HR1312-R56M	0.56	10	1.7	0.70	0.80	40	60
HR1312-R60M	0.60	10	1.7	0.70	0.80	40	60
HR1312-R68M	0.68	10	1.7	0.70	0.80	40	50
HR1312-R80M	0.80	10	1.7	0.70	0.85	40	50
HR1312-1R0M	1.00	10	1.5	1.20	1.35	30	50
HR1312-1R2M	1.20	10	1.5	1.20	1.50	30	40
HR1312-1R5M	1.50	10	1.4	1.50	1.70	25	30
HR1312-2R0M	2.00	10	1.2	2.90	3.30	17	25
HR1312-2R2M	2.20	10	1.2	2.90	3.30	17	25

Note: 1. K= \pm 10%, M= \pm 20%, N= \pm 30%

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Dimensions(mm)



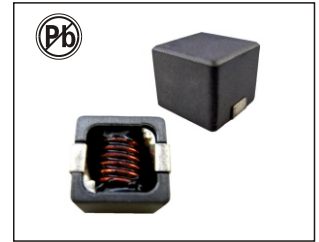
Winding



1. All test Data is referenced to 25°C ambient.
2. Testing Instrument: L: HP4192A, CH1302, CH3320, CH3320S LCR METER / Ddc: Agilent33420A Micro OHMMETER.
3. I_{rms} will cause the coil temperature rise Approximately Δ T=40°C without core loss.
4. I_{sat} will cause L₀ to drop approximately 20%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
6. Operating Temperature & Storage Temperature: -25°C - +125°C.

SMD HIGH CURRENT POWER INDUCTORS

HR SERIES



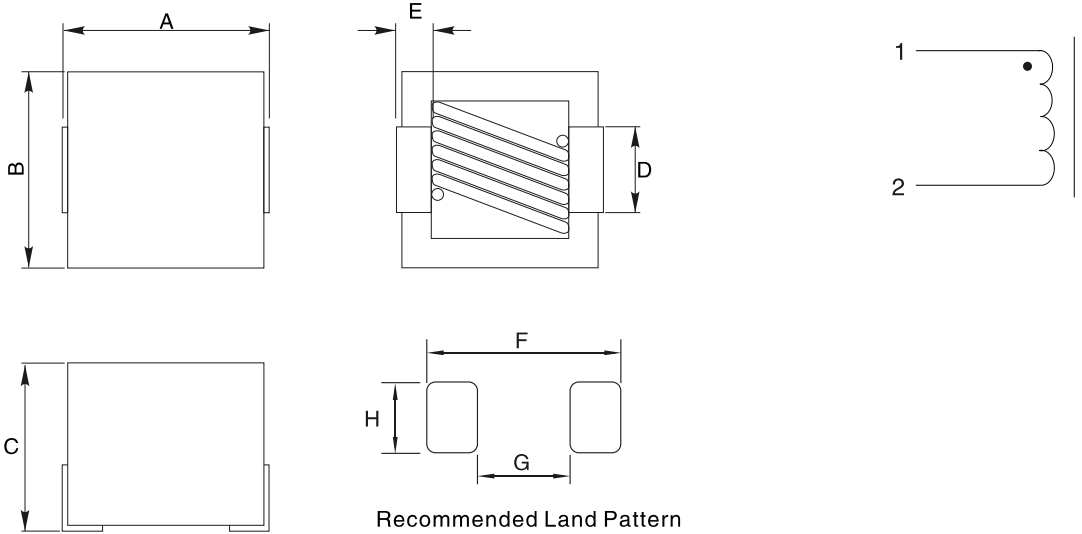
FEATURES:

- High current and Low DCR
- Low profile for machine placement
- Minimize electromagnetic interference
- Prevent EMI effect via precise impedance
- Custom design available

COMMON APPLICATIONS:

- Power Line Filter for DC-DC Converter.
- Switching Power Supplier.
- Personal Computers and Other handheld Electronic Equipment.

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



Dimensions(mm)

Part Number	A	B	C	D	E	F	G	H	Packing (Pcs/Reel)
HR0807 Series	7.9 ± 0.3	8.4 ± 0.4	7.0 ± 0.4	2.3 ± 0.2	1.5 ± 0.2	8.5	4.3	2.9	500
HR1009 Series	10.0 ± 0.3	10.9 ± 0.4	9.3 ± 0.5	3.0 ± 0.2	1.6 ± 0.2	10.6	6.2	3.6	400
HR1210 Series	11.4 ± 0.4	12.1 ± 0.4	9.5 ± 0.5	3.5 ± 0.2	2.0 ± 0.2	12.0	6.8	4.1	300

Notes:

1. All test Data is referenced to 25°C ambient.
2. Testing Instrument: L: HP4192A, CH1302, CH3320, CH3320S LCR METER / Ddc: Agilent33420A Micro OHMMETER.
3. Test condition: 100KHz, 0.1V
4. Irms will cause the coil temperature rise Approximately $\Delta T=40^{\circ}\text{C}$ without core loss.
5. Isat will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
7. Operating Temperature & Storage Temperature: $-25^{\circ}\text{C} - +125^{\circ}\text{C}$.

Note: All specifications subject to change without notice.

SMD HIGH CURRENT POWER INDUCTORS

ELECTRICAL CHARACTERISTICS:

Part Number	L(0A) $\mu H \pm 20\%$	I _{rms} (A)	I _{sat} (A)	DCR (m Ω)Max
HR0807-R30M	0.3	20.5	36.0	1.54
HR0807-R47M	0.47	19.0	32.0	1.89
HR0807-R56M	0.56	19.0	28.0	1.89
HR0807-R68M	0.68	19.0	23.5	1.89
HR0807-R82M	0.82	17.0	23.0	3.25
HR0807-1R0M	1.0	17.0	24.0	3.25
HR0807-1R5M	1.5	16.5	18.5	4.84
HR0807-2R2M	2.2	16.5	12.5	4.84
HR0807-3R3M	3.3	14.0	8.5	7.15
HR0807-4R7M	4.7	7.5	8.0	13.64
HR0807-6R8M	6.8	5.5	7.5	24.42
HR0807-100M	10	4.4	7.0	44.55
HR1009-R22M	0.22	21.5	60.0	0.66
HR1009-R33M	0.33	21.5	55.0	0.66
HR1009-R47M	0.47	20.5	47.0	0.88
HR1009-R68M	0.68	20.0	38.0	1.49
HR1009-R82M	0.82	20.0	36.0	1.49
HR1009-1R0M	1.0	20.0	27.5	1.49
HR1009-1R5M	1.5	18.0	27.0	2.75
HR1009-2R2M	2.2	16.5	22.0	4.07
HR1009-3R3M	3.3	14.0	15.5	5.94
HR1009-4R7M	4.7	13.0	15.0	9.02
HR1009-6R8M	6.8	11.5	11.0	14.52
HR1009-8R2M	8.2	11.5	8.0	14.52
HR1009-100M	10	9.0	8.0	22.77
HR1210-R22M	0.22	27.0	60.0	0.58
HR1210-R33M	0.33	27.0	55.0	0.58
HR1210-R47M	0.47	26.0	48.0	0.79
HR1210-R68M	0.68	26.0	38.0	0.79
HR1210-R82M	0.82	24.0	36.0	1.29
HR1210-1R0M	1.0	24.0	32.0	1.29
HR1210-R15M	1.5	19.5	27.0	2.31
HR1210-2R2M	2.2	18.0	23.0	3.36
HR1210-3R3M	3.3	17.0	17.0	4.84
HR1210-4R7M	4.7	15.5	17.0	6.99
HR1210-6R8M	6.8	13.0	13.0	9.88
HR1210-8R2M	8.2	13.0	12.0	10.89
HR1210-100M	10.0	9.0	10.0	15.84

Note:1. K= $\pm 10\%$,M= $\pm 20\%$,N= $\pm 30\%$