

ON-BOARD TYPE HIGH CURRENT POWER INDUCTORS

HR 129N, HR 1310 SERIES

FEATURES:

- Lowest Height (9.0mm/max)(HR 129N Series) (10.0mm/max)(HR 1310 Series) in this package footprint.
- Shielded Construction.(HR Series)
- 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.

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities
- Tolerance: $M = \pm 20\%$ Standard, Tighter Tolerances Available

COMMON APPLICATIONS:

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

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Lo(μ H)	Test Frequency (Hz)Max	DCR ($m\Omega$)Max	Irms (A) max.	Isat (A) max.
HR 129N-R60M	$0.60 \pm 20\%$	0.25V/100K	1.0	30	40
HR 1310-R50M	$0.50 \pm 20\%$	0.25V/100K	0.85	45	50

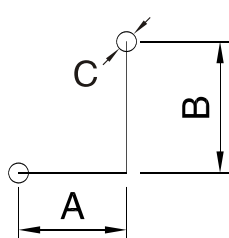
TECHNICAL INFORMATION

1. Testing Instrument: L: HP4192A, CH1302, CH3320, CH3320S LCR METER / Ddc: Agilent33420A Micro OHMMETER.
2. Heat Rated Current(Irms) will cause the coil temperature rise Approximately $\Delta T = 60^\circ\text{C}$ without core loss.
3. Isat(A) will cause L0 to drop approximately 20%.
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
5. Operating Temperature & Storage Temperature: $-40^\circ\text{C} - +105^\circ\text{C}$.

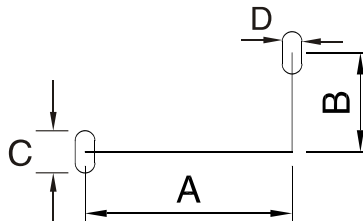
Dimensions(mm)

Part Number	A	B	C	D	E	F
HR 129N-R60M	13.0max	14.0max	9.0max	3.5 ± 0.5	6.0 ± 0.5	7.3 ± 0.5
HR 1310-R50M	14.0max	14.0max	10.0max	3.4 ± 0.5	11.5 ± 0.5	5.5 ± 0.5

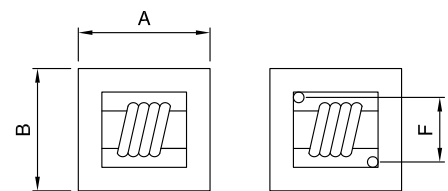
SOLDERING AND MOUNTING



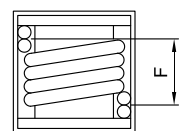
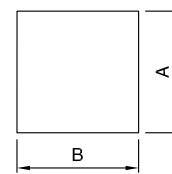
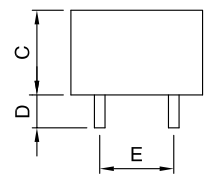
HR 129N



HR 1310



HR 129N



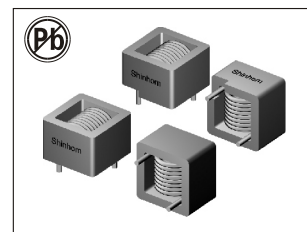
HR 1310

Land Patterns For Reflow Soldering				
Size	A(mm)	B(mm)	C(mm)	D(mm)
HR 129N-R60M	6.0 ± 0.5	7.3 ± 0.5	2.0 ± 0.5	—
HR 1310-R50M	11.5 ± 0.5	5.5 ± 0.5	2.7 ± 0.5	1.6 ± 0.5

Note: All specifications subject to change without notice.

ON-BOARD TYPE HIGH CURRENT POWER INDUCTORS

HR 118S, HR 1320 SERIES



FEATURES:

- Lowest Height (9.0mm/max)(HR 118S Series) (10.0mm/max)(HR 1320 Series) in this package footprint.
- Shielded Construction.(HR Series)
- 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.

OPTIONS:

- Tape & Reel is Standard Bulk packaging Available for Smaller Quantities
- Tolerance: $M = \pm 20\%$ Standard, Tighter Tolerances Available

COMMON APPLICATIONS:

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

ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Lo(μ H)	Test Frequency (Hz)Max	DCR ($m\Omega$)Max	Irms (A) max.	Isat (A) max.
HR 118S-2R0M	$2.00 \pm 20\%$	0.25V/100K	3.5	15	20
HR 1320-R40M	$0.40 \pm 20\%$	0.25V/100K	1.0	38	48
HR 1320-R50M	$0.50 \pm 20\%$	0.25V/100K	1.3	35	45

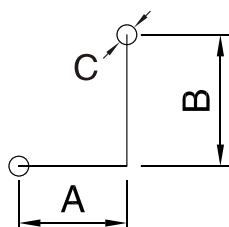
TECHNICAL INFORMATION

1. Testing Instrument: L: HP4192A, CH1302, CH3320, CH3320S LCR METER / Ddc: Agilent33420A Micro OHMMETER.
2. Heat Rated Current(Irms) will cause the coil temperature rise Approximately $\Delta T = 60^\circ\text{C}$ without core loss.
3. Isat(A) will cause L0 to drop approximately 20%.
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
5. Operating Temperature & Storage Temperature: $-40^\circ\text{C} - +105^\circ\text{C}$.

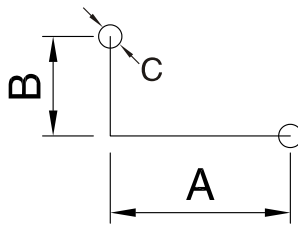
Dimensions(mm)

Part Number	A	B	C	D	E	F
HR 118S-2R0M	11.30max	11.30max	8.0max	3.4 ± 0.5	7.5 ± 0.5	7.5 ± 0.5
HR 1320 series	12.80 ± 0.2	9.20 ± 0.2	10.0max	4.5 ± 0.5	6.2 ± 0.2	10.0 ± 0.2

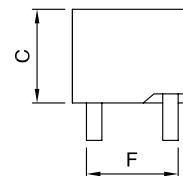
SOLDERING AND MOUNTING



HR 118S



HR 1320 series



HR 1320 series

Land Patterns For Reflow Soldering			
Size	A(mm)	B(mm)	C(mm)
HR 118S	6.0 ± 0.5	7.3 ± 0.5	1.0max
HR 1320 series	8.5 ± 0.2	4.7 ± 0.2	2.0 ± 0.2

Note: All specifications subject to change without notice.