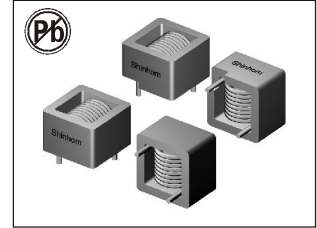


# ON-BOARD TYPE HIGH CURRENT POWER INDUCTORS

## 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/ $\mu$  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

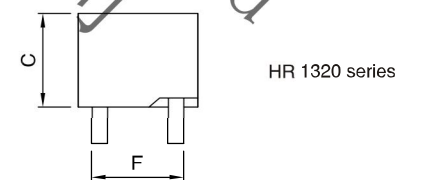
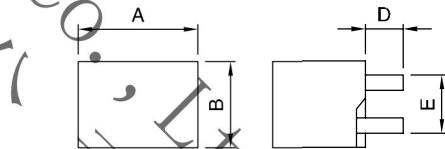
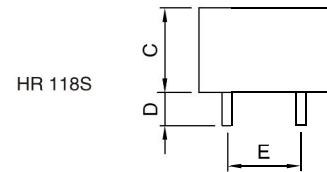
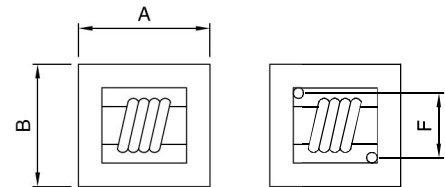
### COMMON APPLICATIONS:

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

### ELECTRICAL CHARACTERISTICS:

Part Number	Inductance Lo( $\mu$ H)	Test Frequency (Hz)Max	DCR ( $m\Omega$ )Max	I <sub>rms</sub> (A) max.	I <sub>sat</sub> (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

### PHYSICAL CHARACTERISTICS



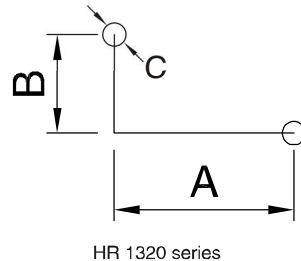
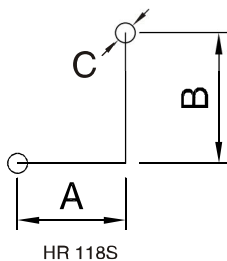
### TECHNICAL INFORMATION

1. Testing Instrument: L: HP4192A, CH1302, CH3320, CH3320S LCR METER / Ddc: Agilent33420A Micro OHMMETER.
2. Heat Rated Current(I<sub>rms</sub>) will cause the coil temperature rise Approximately  $\Delta T=60^{\circ}\text{C}$  without core loss.
3. I<sub>sat</sub>(A) will cause L<sub>0</sub> to drop approximately 20%.
4. The part temperature (ambient + temp rise) should not exceed 125 $^{\circ}\text{C}$  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 $\pm$ 0.5	7.5 $\pm$ 0.5	7.5 $\pm$ 0.5
HR 1320 series	12.80 $\pm$ 0.2	9.20 $\pm$ 0.2	10.0max	4.5 $\pm$ 0.5	6.2 $\pm$ 0.2	10.0 $\pm$ 0.2

### SOLDERING AND MOUNTING



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

Note: All specifications subject to change without notice.