

# 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/  $\mu$  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(uH)	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

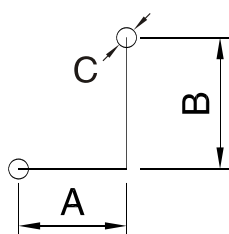
### TECHNICAL INFORMATION

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  $125^{\circ}\text{C}$  under worst case operating conditions.
5. Operating Temperature & Storage Temperature:  $-40^{\circ}\text{C} - +105^{\circ}\text{C}$ .

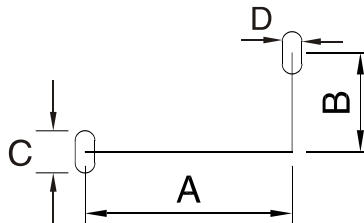
Dimensions(mm)

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

### SOLDERING AND MOUNTING

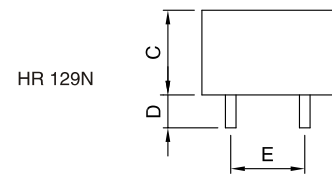
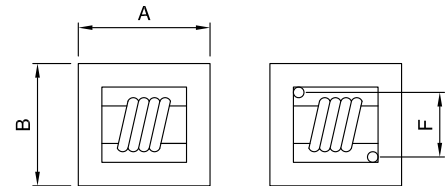


HR 129N

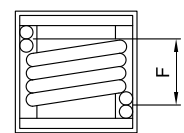
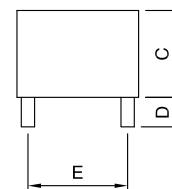
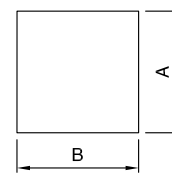


HR 1310

### PHYSICAL CHARACTERISTICS



HR 129N



HR 1310

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

Note: All specifications subject to change without notice.