

## Providence Electronics Corp.



# HIGH CURRENT POWER BEAD INDUCTORS

MODEL NO. : SHB-114090 SERIES

### Features:

- \* SMD version.
- \* Lowest core loss (Mn-Zn ferrite).
- \* Magnetically Shielded.
- \* Extremely low DCR.
- \* Frequency range up to 2 MHz.
- \* Compliant with RoHS and REACH.



- \* Servers.
- \* DC/DC converter in power regulation system.



| PART NO          | INDUCTANCE<br>@0 ADC<br>(nH) ±20% | DCR<br>(mΩ)<br>±10% | INDUCTANCE<br>@RATED<br>CURRENT<br>(nH) TYP | RATED<br>CURRENT<br>(ADC)<br>(NOTE 2) | SATURATION<br>CURRENT<br>(ADC)<br>(NOTE 3) | TEMPERATURE RISE CURRENT (ADC) (NOTE 4) |
|------------------|-----------------------------------|---------------------|---|---------------------------------------|--|---|
| SHB-114090-R22-2 | 225                               | 0.51                | 225   | 35                                    | 65   | 35                                      |
| SHB-114090-R27-2 | 270                               | 0.51                | 280   | 35                                    | 50   | 35                                      |
| SHB-114090-R32-2 | 325                               | 0.51                | 325   | 35                                    | 45   | 35                                      |
| SHB-114090-R47-2 | 470                               | 0.51                | 350   | 30                                    | 30   | 35                                      |

NOTE(1): Measuring condition: 100 KHZ,1Vrms.

NOTE(2): The rated current is either the saturation current or the temperature rise current depending on which value is lower.

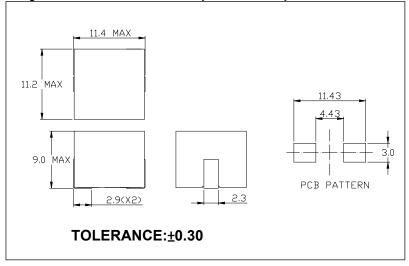
NOTE(3): The saturation current indicates the value of DC current is approximately 20% lower than its initial value of inductance.

NOTE(4):  $\triangle$  T=40°C approximately under the temperature rise current.

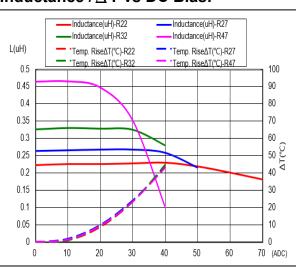
NOTE(5): Operating temperature range: -40°C~+125°C.

NOTE(6): Storage time: The recommended storage time of Inductor is maximum 12 months, and don't suggest to use the parts over 12 months.

Physical Dimension : (unit :mm)



### Inductance $/ \triangle T$ vs DC Bias:



#### **PACKAGING SPEC:**

- 1. REEL SIZE & UNITS PER REEL :13",250PCS.
- 2. TAPE WIDTH:24mm.
- 3. REEL WIDTH:29.5mm.
- 4. COMPONENT PITCH:24mm.