

# POWER INDUCTOR

## MHB1207SG SERIES

### FEATURES

- RoHS compliant
- Super low resistance
- Designed for high current power supply applications
- Ferrite core material Magnetic shield construction provide good EMI
- Tape & reel packing
- Solder profile acc.J-STD-020D

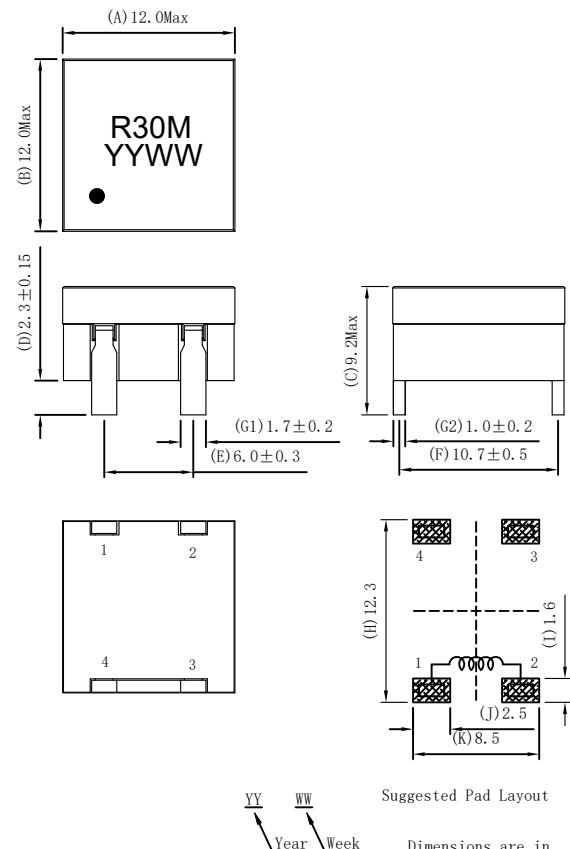
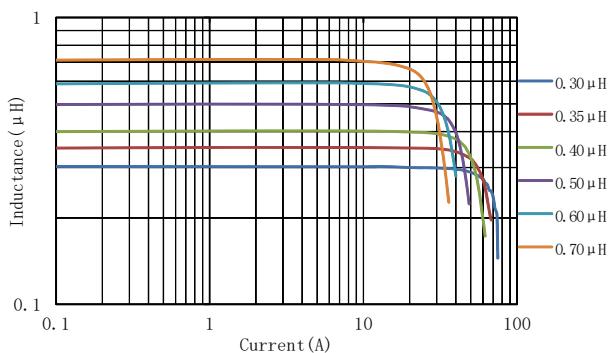


### APPLICATIONS

- High current DC-DC converters
- Telecom soft switches, Base stations
- Battery powered devices
- VRM, multi-phase buck regulators
- PDA, Notebook computers, PC Workstations, Routers, Servers

| Part number   | Inductance ( $\mu$ H) | Tolerance ( $\pm$ %) | DCR ( $m\Omega$ ) | I <sub>sat</sub> (A)MIN | I <sub>rms</sub> (A) |
|---------------|-----------------------|----------------------|-------------------|-------------------------|----------------------|
| MHB1207SGR30M | 0.30                  | 20                   | 0.50±10%          | 0.216 $\mu$ H@67A       | 36                   |
| MHB1207SGR35M | 0.35                  | 20                   | 0.50±10%          | 0.252 $\mu$ H@57A       | 36                   |
| MHB1207SGR40M | 0.40                  | 20                   | 0.50±10%          | 0.288 $\mu$ H@50A       | 36                   |
| MHB1207SGR50M | 0.50                  | 20                   | 0.50±10%          | 0.360 $\mu$ H@40A       | 36                   |
| MHB1207SGR60M | 0.60                  | 20                   | 0.50±10%          | 0.432 $\mu$ H@33A       | 36                   |
| MHB1207SGR70M | 0.70                  | 20                   | 0.50±10%          | 0.504 $\mu$ H@28A       | 36                   |

### Typical L vs Current



### ABSOLUTE MAXIMUM RATINGS

|   |                 |
|---|-----------------|
| Operating temperature range (including self-temperature rise) | -40°C to +125°C |
| Storage temperature range                                     | -40°C to +125°C |

### SOLDERING INFORMATION

|                            |           |
|----------------------------|-----------|
| Peak reflow temperature    | 250°C     |
| Pin finish                 | Matte tin |
| Moisture sensitivity level | 1         |

### PACKAGING INFORMATION

|           |                 |
|-----------|-----------------|
| Tape&Reel | 250pcs per reel |
| Weight    | 4.6g/pcs        |

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 500 kHz, 1.0VRms.
3. Irms is the current that caused a approx 45°C temperature rise from 25°C ambient.