

### FEATURES

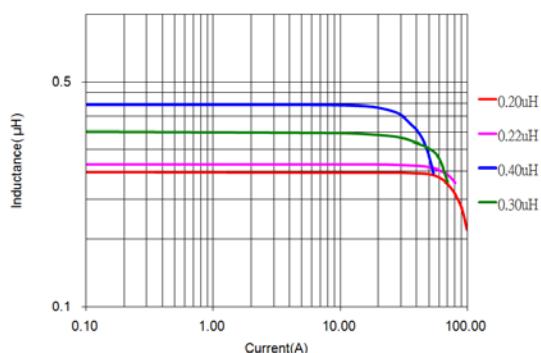
- RoHS compliant
- Super low resistance
- Designed for high current power supply applications
- Ferrite core material magnetic shield construction provide good EMI
- Tape & reel packing
- Solder profile acc.J-STD-020D

### APPLICATIONS

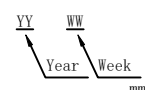
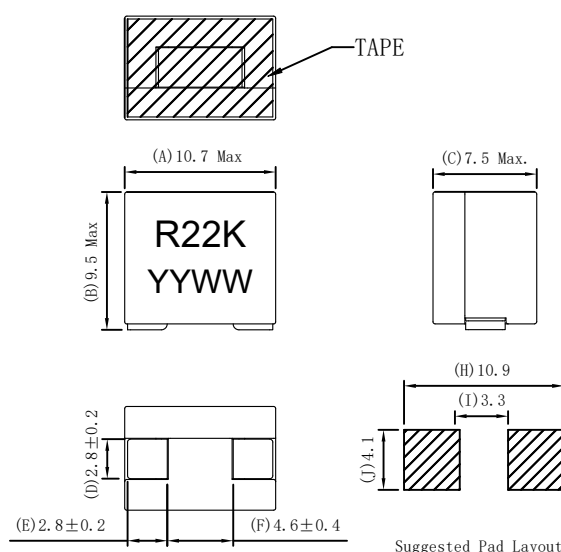
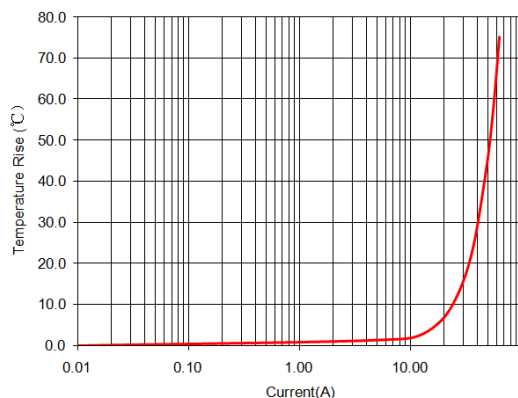
- High current DC-DC converters
- Telecom soft switches, Base stations
- Battery powered devices
- VRM, multi-phase buck regulators
- PDA, Notebook computers, PC Workstations, Routers, Servers

| Part number   | Inductance<br>( $\mu$ H) | Tolerance<br>( $\pm$ %) | DCR<br>(m $\Omega$ ) | Isat<br>(A) | Irms<br>(A) |
|---------------|--------------------------|-------------------------|----------------------|-------------|-------------|
| MHB1110SGR15K | 0.15                     | 10                      | 0.23 $\pm$ 5%        | 90          | 45          |
| MHB1110SGR20K | 0.20                     | 10                      | 0.23 $\pm$ 5%        | 70          | 45          |
| MHB1110SGR22K | 0.22                     | 10                      | 0.23 $\pm$ 5%        | 64          | 45          |
| MHB1110SGR25K | 0.25                     | 10                      | 0.23 $\pm$ 5%        | 56          | 45          |
| MHB1110SGR27K | 0.27                     | 10                      | 0.23 $\pm$ 5%        | 55          | 45          |
| MHB1110SGR30K | 0.30                     | 10                      | 0.23 $\pm$ 5%        | 47          | 45          |
| MHB1110SGR32K | 0.32                     | 10                      | 0.23 $\pm$ 5%        | 42          | 45          |
| MHB1110SGR40K | 0.40                     | 10                      | 0.23 $\pm$ 5%        | 36          | 45          |

### Typical L vs Current



### Temperature Rise vs Current



Dimensions are in mm

### ABSOLUTE MAXIMUM RATINGS

|                                                                 |                 |
|-----------------------------------------------------------------|-----------------|
| Operating temperature rang<br>(including self-temperature rise) | -40°C to +125°C |
| Storage temperature rang                                        | -40°C to +125°C |

### SOLDERING INFORMATION

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

### PACKAGING INFORMATION

|           |                  |
|-----------|------------------|
| Tape&Reel | 350 pcs per reel |
| Weigh     | 3.3 g/pcs        |

### Notes

1. Electrical specification at 25°C.
2. Inductance tested at 100 kHz, 1.0Vrms.
3. Isat is the DC current at which inductance drop (20% Typ) from its value without current.
4. Iirms is the current that caused a approx 40°C temperature rise from 25°C ambient.