



FEATURES

- Shielded structure
- Low DCR with high efficiency
- Large current with small size
- High reliability
- AEC-Q200 qualified
- RoHS compliant

APPLICATIONS

- DC-DC power supply and noise filter circuits
- Tablet, notebook PC, workstation and server etc
- Telecom for basestation etc
- LED lighting
- Automotive

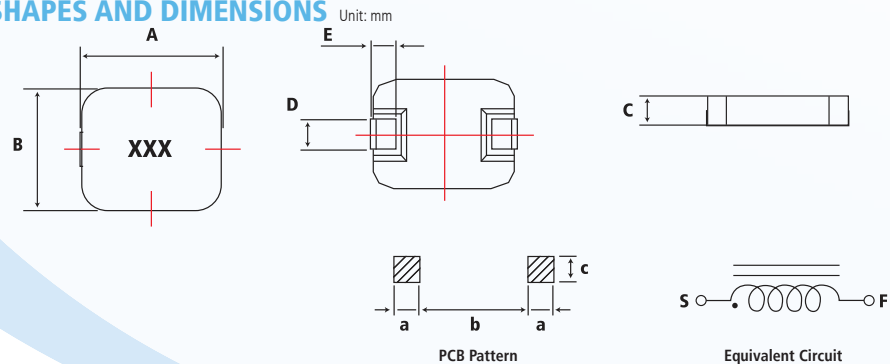
ELECTRICAL CHARACTERISTICS

| PART NO. | INDUCTANCE ($\mu\text{H} \pm 20\%$) | DCR ($\text{m}\Omega$) MAX | SATURATION CURRENT ⁴ (A) MAX | RMS CURRENT ³ (A) MAX |
|----------------|--|---------------------------------|--|-------------------------------------|
| MGV0625R10M-10 | 0.10 | 1.70 | 50.0 | 30.0 |
| MGV0625R22M-10 | 0.22 | 3.20 | 34.0 | 21.0 |
| MGV0625R33M-10 | 0.33 | 4.10 | 22.0 | 18.0 |
| MGV0625R47M-10 | 0.47 | 6.50 | 21.0 | 13.5 |
| MGV0625R68M-10 | 0.68 | 9.40 | 18.0 | 11.0 |
| MGV0625R82M-10 | 0.82 | 11.80 | 17.0 | 10.0 |
| MGV06251R0M-10 | 1.00 | 14.20 | 16.0 | 9.0 |
| MGV06251R5M-10 | 1.50 | 21.20 | 15.0 | 7.5 |
| MGV06252R2M-10 | 2.20 | 34.00 | 14.0 | 6.5 |
| MGV06253R3M-10 | 3.30 | 51.60 | 13.0 | 5.0 |
| MGV06254R7M-10 | 4.70 | 63.00 | 10.0 | 4.5 |
| MGV06256R8M-10 | 6.80 | 95.00 | 8.0 | 3.5 |
| MGV06258R2M-10 | 8.20 | 106.00 | 7.0 | 3.0 |
| MGV0625100M-10 | 10.00 | 129.00 | 6.0 | 2.5 |

Remark:

- 1 Tolerance: M: $\pm 20\%$
- 2 Inductance tested at 100KHz, 0.25V
- 3 RMS Current is defined based on temperature rise approximate 40°C without core loss (ambient temperature 25 \pm 5°C)
- 4 Saturation Current is the DC current at which the inductance drops off approximately 25% from its value without current. (ambient temperature 25 \pm 5°C)
5. Operating temperature range: -40°C~+125°C (including self-temperature rise)
6. Storage temperature range (packaging conditions): 25 \pm 5°C and RH 70%(MAX.)

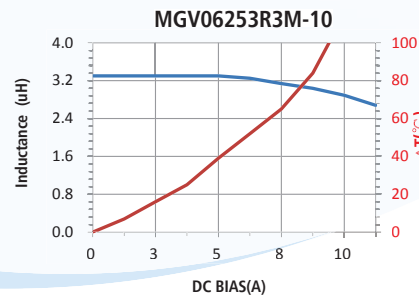
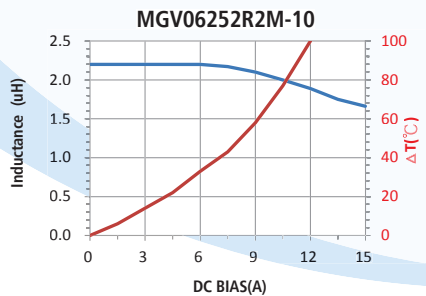
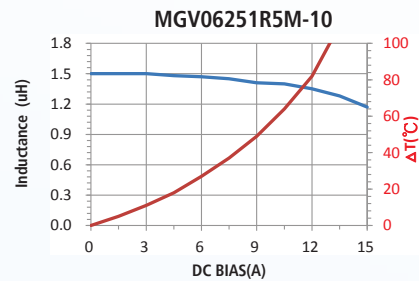
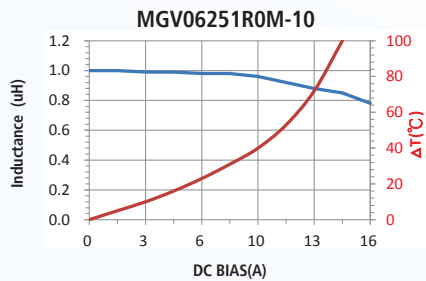
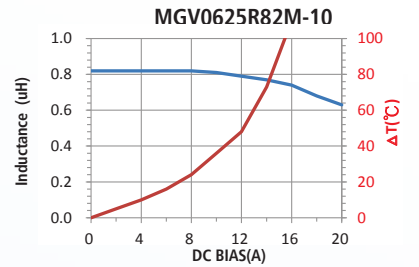
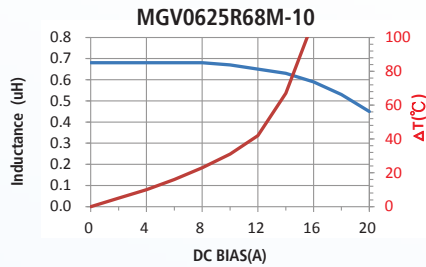
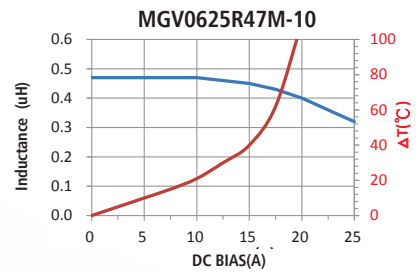
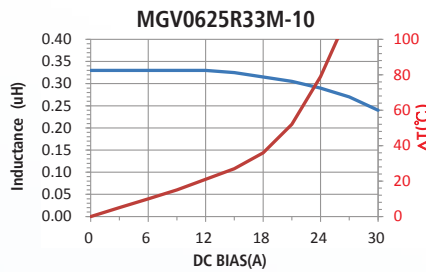
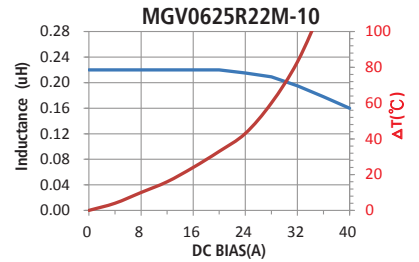
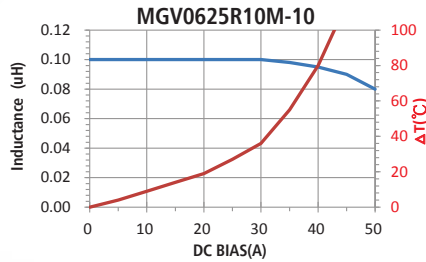
SHAPES AND DIMENSIONS



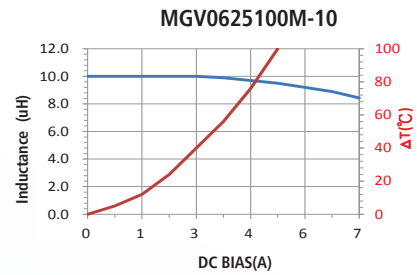
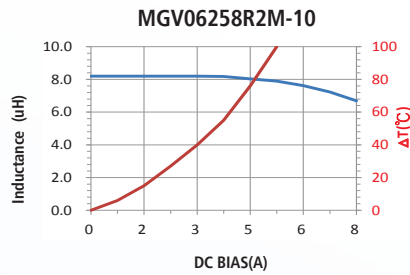
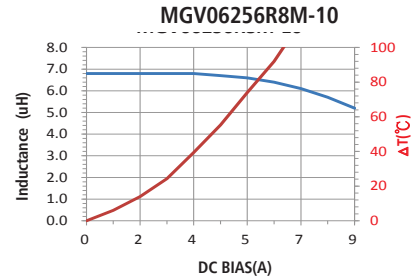
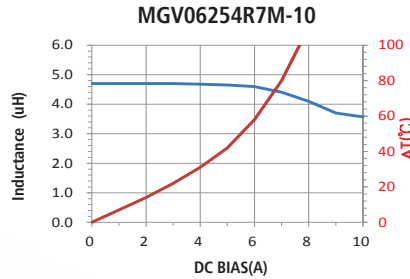
| A | B | C | D | E | a | b | c |
|---------------|---------------|---------------|---------------|---------------|---------|---------|---------|
| 7.3 \pm 0.5 | 6.7 \pm 0.3 | 2.5 \pm 0.3 | 2.9 \pm 0.3 | 1.6 \pm 0.5 | 2.5 ref | 3.7 ref | 3.5 ref |

USA: +1.866.928.8181
Europe: +49.0.8031.2460.0
Asia: +86.755.2714.1166

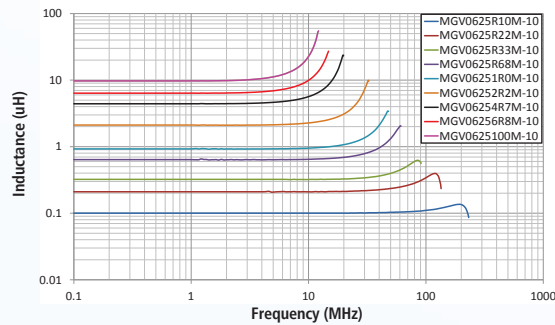
TYPICAL ELECTRICAL CHARACTERISTICS



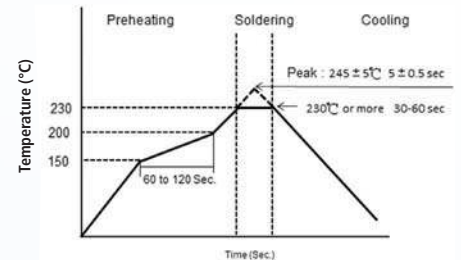
TYPICAL ELECTRICAL CHARACTERISTICS



INDUCTANCE VS FREQUENCY CURVE



TEMPERATURE PROFILE OF REFLOW SOLDERING



ORDERING INFORMATION

PART NUMBER EXAMPLE

| | | | | | | | | | | | | | |
|---------------------|---|---|----------------|---|---|---|---|---|--|---|---|---|---|
| M | G | V | 0 | 6 | 2 | 5 | 1 | R | 5 | M | - | 1 | 0 |
| Product series code | | | Part size code | | | Inductance value code <small>(i.e. 1R5: 1.5uH)</small> | | | Tolerance % <small>(i.e. M: ±20%)</small> | PB free code <small>(i.e. 10: PB free)</small> | | | |

PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 2000
- Reel Size = 13 inches