



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

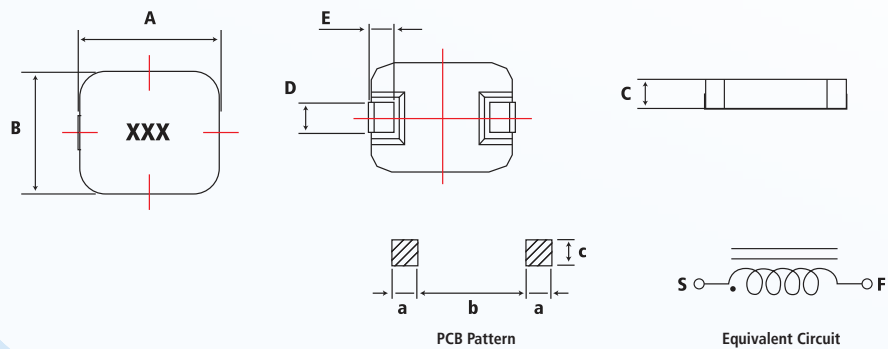
ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE ($\mu\text{H} \pm 20\%$)	DCR (m Ω) MAX	SATURATION CURRENT ⁴ (A) MAX	RMS CURRENT ³ (A) MAX
MGV0502R10M-10	0.1	3.90	45.00	17.00
MGV0502R22M-10	0.22	5.20	22.00	15.00
MGV0502R33M-10	0.33	8.20	25.00	12.00
MGV0502R47M-10	0.47	9.40	21.00	11.50
MGV0502R68M-10	0.68	12.40	15.00	10.00
MGV05021R0M-10	1.0	20.00	16.00	7.00
MGV05022R2M-10	2.2	50.10	12.50	4.20
MGV05023R3M-10	3.3	85.50	8.50	3.30
MGV05024R7M-10	4.7	116.60	5.00	2.80

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 drop off approximate 25% from its value without current. (ambient temperature 25 \pm 5°C)
5. Operate temperature range:-40°C~+125°C (including self-temperature rise)
6. Storage temperature range: (packaging conditions): 25 \pm 5°C and RH 70%(MAX.)

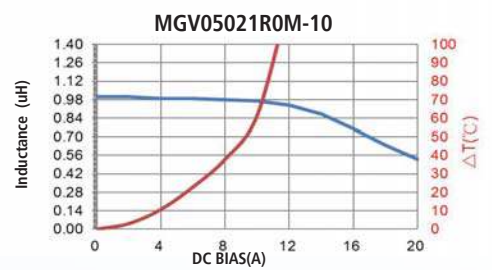
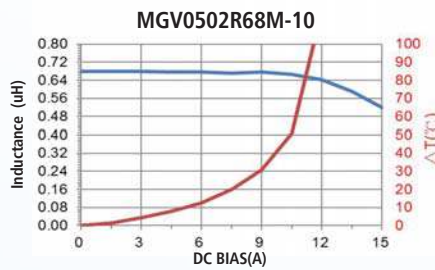
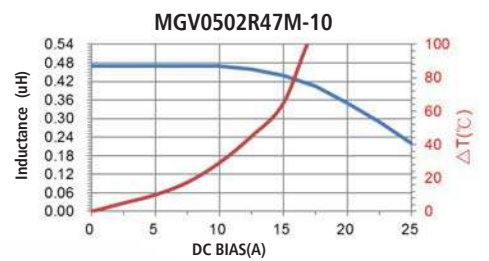
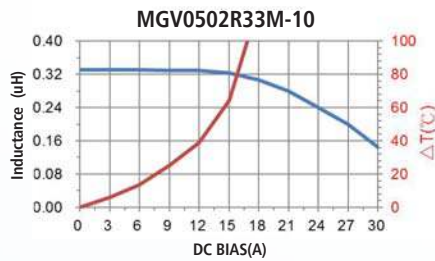
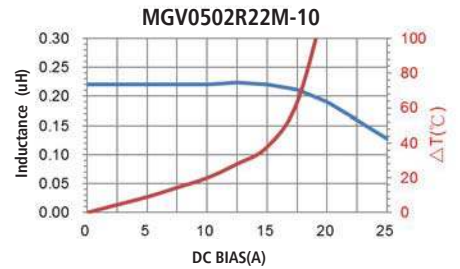
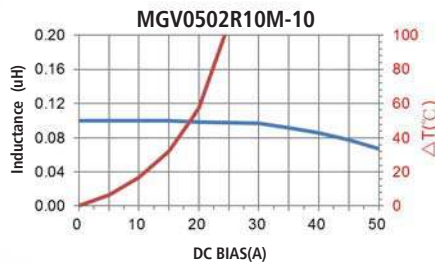
SHAPES AND DIMENSIONS Unit: mm



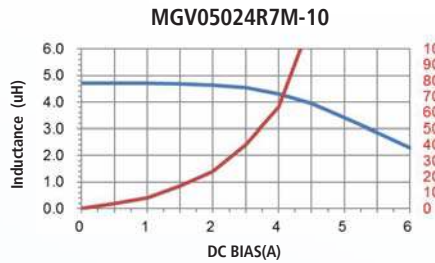
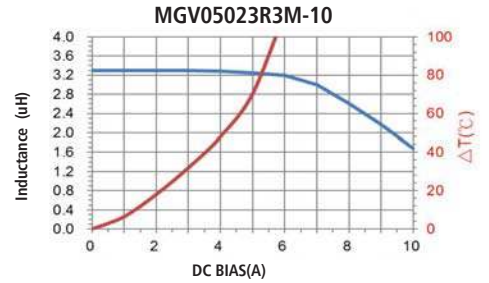
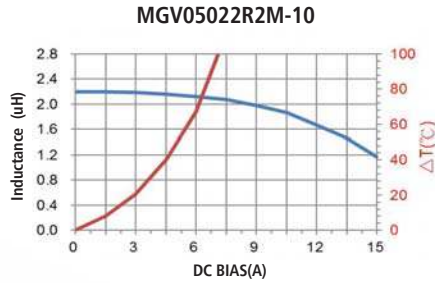
A	B	C	D	E	a	b	c
5.5 \pm 0.5	5.1 \pm 0.3	2.0 \pm 0.3	1.5 \pm 0.3	1.2 \pm 0.5	2.0 ref	3.0 ref	2.5 ref

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

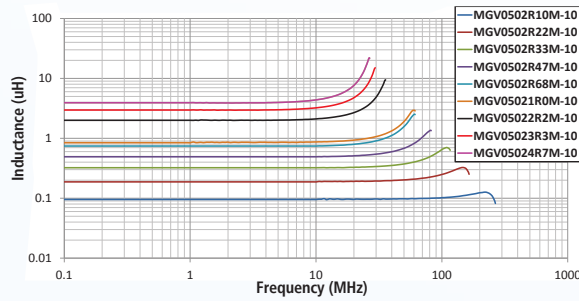
TYPICAL ELECTRICAL CHARACTERISTICS



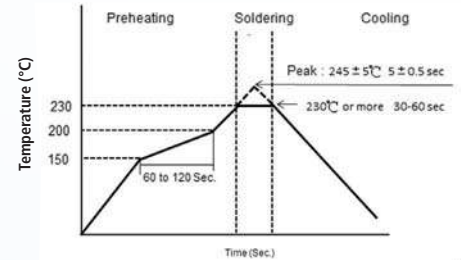
TYPICAL ELECTRICAL CHARACTERISTICS



INDUCTANCE VS FREQUENCY CURVE



TEMPERATURE PROFILE OF REFLOW SOLDERING.



ORDERING INFORMATION

PART NUMBER EXAMPLE

M	G	V	0	5	0	2	4	R	7	M	-	1	0
Product series code			Part size code			Inductance value code <small>(i.e. 4R7: 4.7uH)</small>			Tolerance % <small>(i.e. M: ±20% • N: ±30%)</small>		PB free code <small>(i.e. 10: PB free)</small>		

PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 1500
- Reel Size = 13 inches