



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

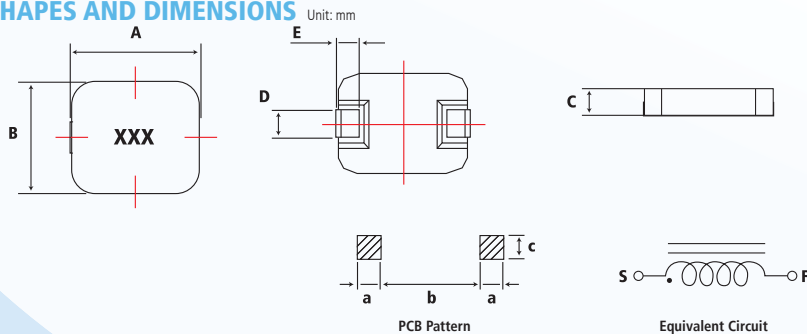
ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE ($\mu\text{H} \pm 20\%$)	DCR (m Ω) MAX	SATURATION CURRENT ⁴ (A) MAX	RMS CURRENT ³ (A) MAX
MGV0605R56M-10	0.56	3.60	18.00	20.00
MGV0605R68M-10	0.68	4.50	17.00	18.00
MGV0605R82M-10	0.82	4.90	16.00	16.50
MGV06051R0M-10	1.00	6.50	15.00	13.00
MGV06051R5M-10	1.50	9.00	13.00	12.00
MGV06052R2M-10	2.20	13.60	12.00	11.00
MGV06053R3M-10	3.30	20.90	9.00	8.50
MGV06054R7M-10	4.70	30.30	7.00	6.50
MGV06055R6M-10	5.60	34.40	7.00	6.00
MGV06056R8M-10	6.80	44.60	6.00	5.50
MGV06058R2M-10	8.20	50.70	5.50	5.50
MGV0605100M-10	10.00	71.30	5.30	4.50

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 $\pm 5^\circ\text{C}$)
- 4 Saturation Current is the DC current at which the inductance drops off approximately 25% from its value without current. (ambient temperature 25 $\pm 5^\circ\text{C}$)
- 5 Operating temperature range: -40°C~+125°C (including self-temperature rise)
- 6 Storage temperature range (packaging conditions): 25 $\pm 5^\circ\text{C}$ and RH 70%(MAX.)

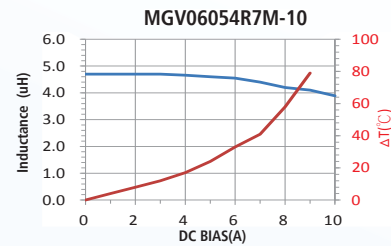
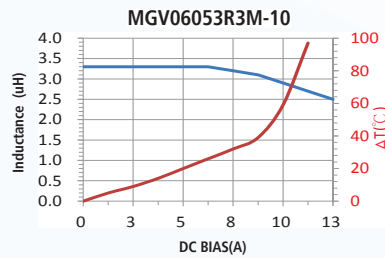
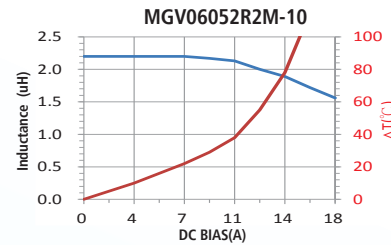
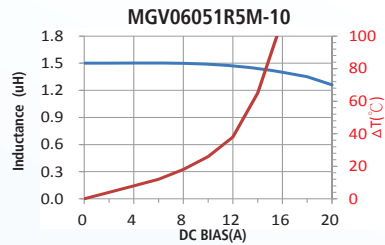
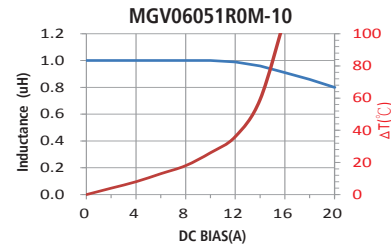
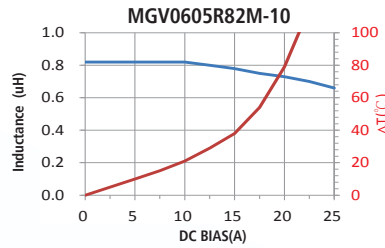
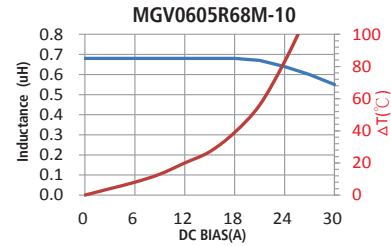
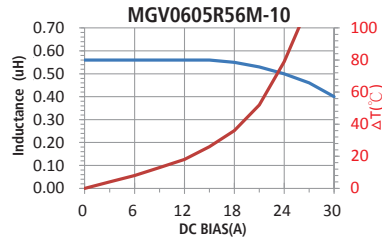
SHAPES AND DIMENSIONS



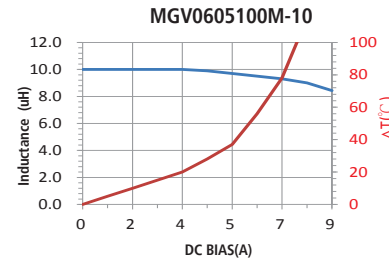
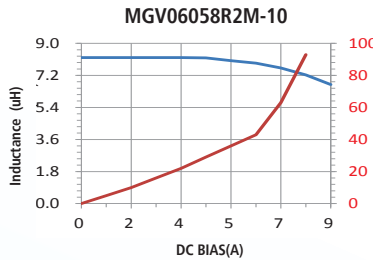
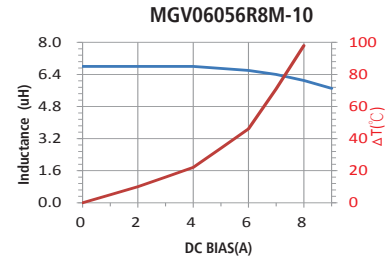
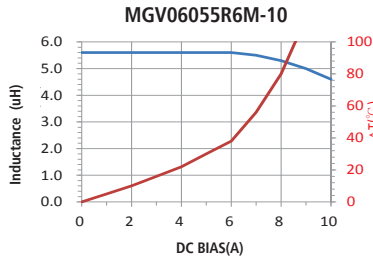
A	B	C	D	E	a	b	c
7.3 ± 0.5	6.7 ± 0.3	5.0 ± 0.3	2.9 ± 0.3	1.6 ± 0.5	2.5 ref	3.7 ref	3.5 ref

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

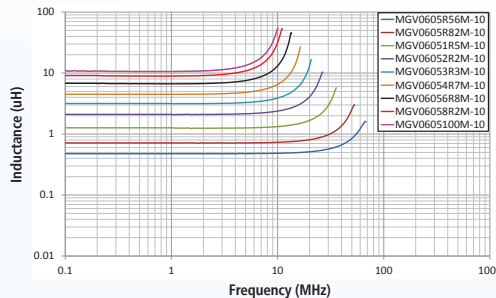
TYPICAL ELECTRICAL CHARACTERISTICS



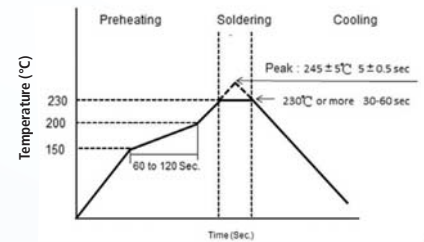
TYPICAL ELECTRICAL CHARACTERISTICS



INDUCTANCE VS FREQUENCY CURVE



TEMPERATURE PROFILE OF REFLOW SOLDERING



ORDERING INFORMATION

PART NUMBER EXAMPLE

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

PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 800
- Reel Size = 13 inches