



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
- Automotive
- LED lighting

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE ($\mu\text{H} \pm 20\%$)	DCR (m Ω) MAX	SATURATION CURRENT ⁴ (A) MAX	RMS CURRENT ³ (A) MAX
MGV0602R10M-10	0.10	3.5	40.0	18.0
MGV0602R15M-10	0.15	5.2	38.0	15.0
MGV0602R22M-10	0.22	5.7	26.0	14.0
MGV0602R33M-10	0.33	7.0	18.0	12.0
MGV0602R47M-10	0.47	9.3	18.0	11.0
MGV0602R68M-10	0.68	13.9	17.0	9.0
MGV0602R82M-10	0.82	15.9	17.0	8.0
MGV06021R0M-10	1.00	18.3	14.0	7.0
MGV06021R5M-10	1.50	34.0	13.0	4.0
MGV06022R2M-10	2.20	46.0	11.5	3.8
MGV06023R3M-10	3.30	60.1	10.0	3.3
MGV06024R7M-10	4.70	78.0	8.0	3.0

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)

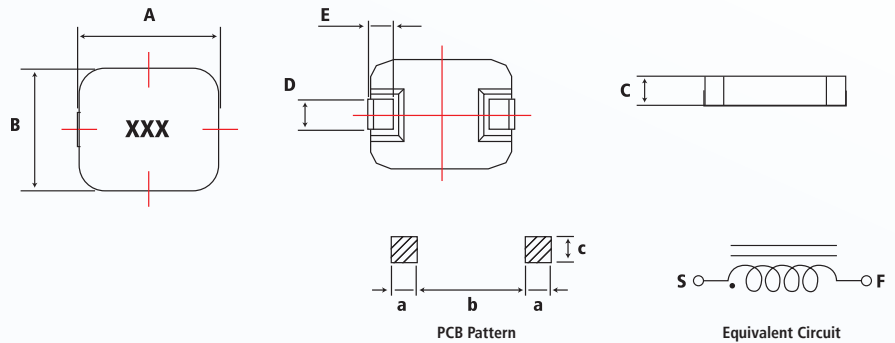
4 Saturation Current is the DC current at which the inductance drop off approximate 25% from its value without current. (ambient temperature 25 $\pm$ 5°C)

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

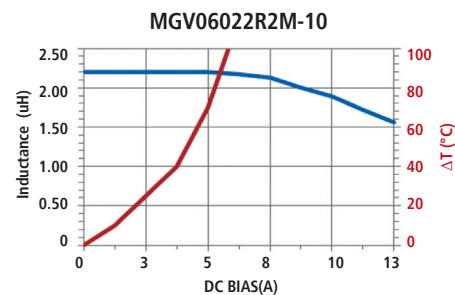
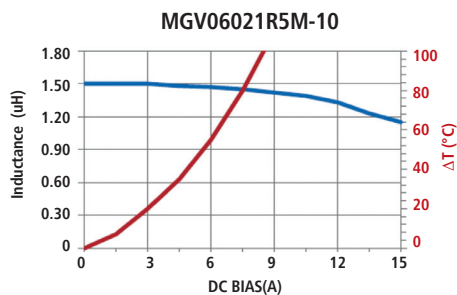
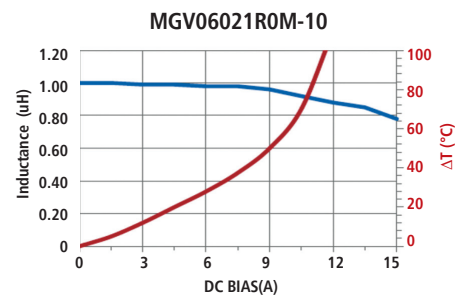
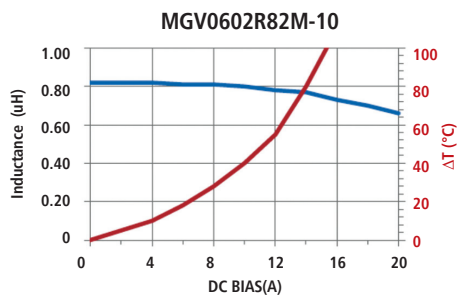
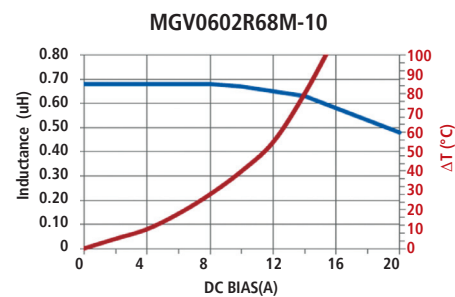
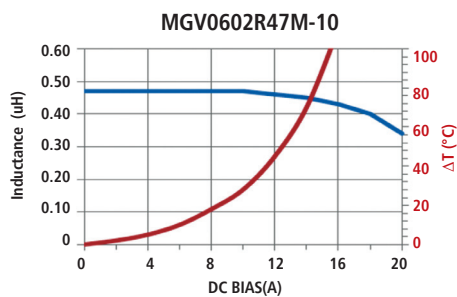
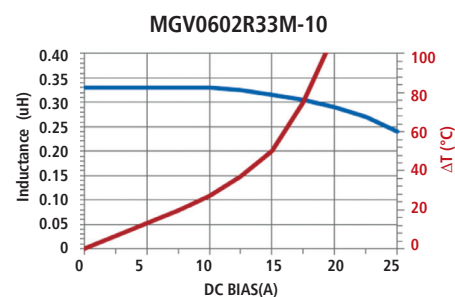
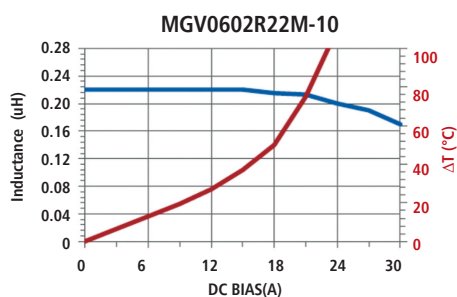
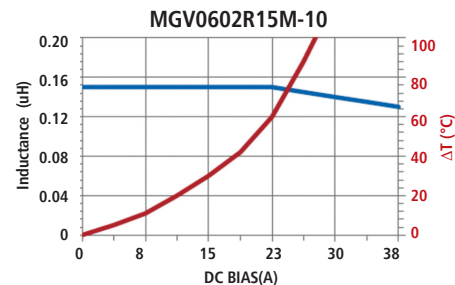
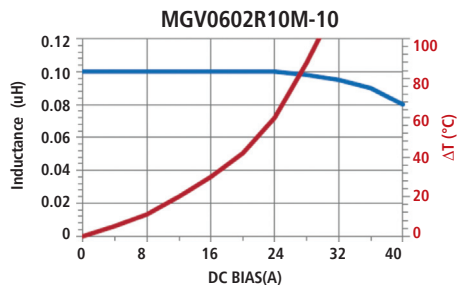
Unit: mm



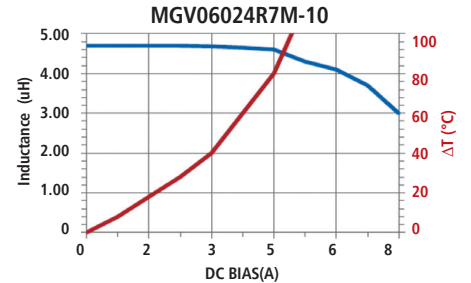
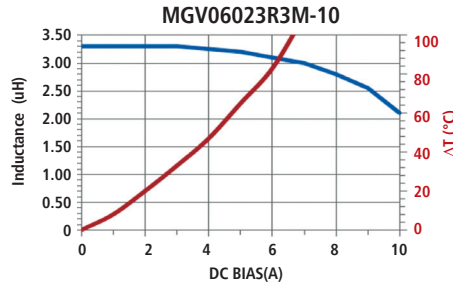
A	B	C	D	E	a	b	c
7.3 $\pm$ 0.5	6.7 $\pm$ 0.3	2.0 $\pm$ 0.3	2.9 $\pm$ 0.3	1.6 $\pm$ 0.5	2.5 ref	3.7 ref	3.5 ref

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

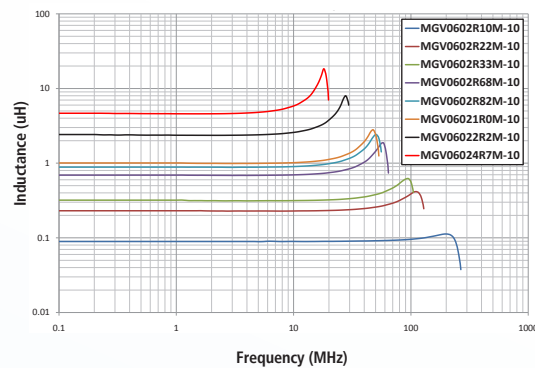
TYPICAL ELECTRICAL CHARACTERISTICS



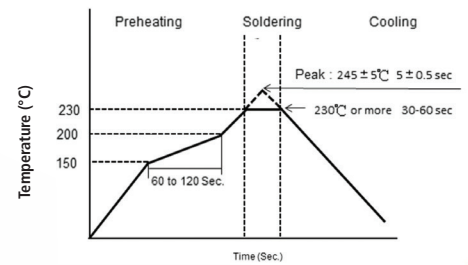
TYPICAL ELECTRICAL CHARACTERISTICS



INDUCTANCE VS FREQUENCY CURVE



TEMPERATURE PROFILE OF REFLOW SOLDERING.



ORDERING INFORMATION

PART NUMBER EXAMPLE

M	G	V	0	6	0	2	R	4	7	M	-	1	0
Product series code			Part size code			Inductance value code (i.e. R47: 47μH)			Tolerance % (i.e. M: ±20%)		PB free code (i.e. 10: PB free)		

PACKAGING INFORMATION

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Laird Technologies:

[MGV0602R82M-10](#) [MGV0602R22M-10](#) [MGV0602R33M-10](#) [MGV0602R47M-10](#) [MGV0602R68M-10](#)
[MGV06021R0M-10](#) [MGV06021R5M-10](#) [MGV06022R2M-10](#) [MGV06023R3M-10](#) [MGV06024R7M-10](#) [MGV0602R10M-10](#) [MGV0602R15M-10](#)