



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
MGV0603R10M-10	0.1	1.70	60.00	32.50
MGV0603R22M-10	0.22	2.80	40.00	23.00
MGV0603R33M-10	0.33	3.90	30.00	20.00
MGV0603R47M-10	0.47	4.20	26.00	17.50
MGV0603R68M-10	0.68	5.50	25.00	15.50
MGV0603R82M-10	0.82	8.00	24.00	13.00
MGV06031R0M-10	1.00	10.00	22.00	11.00
MGV06031R5M-10	1.50	15.00	18.00	9.00
MGV06032R2M-10	2.20	20.00	14.00	8.00
MGV06033R3M-10	3.30	30.00	13.50	6.00
MGV06034R7M-10	4.70	40.00	10.00	5.50
MGV06036R8M-10	6.80	60.00	8.00	4.50
MGV06038R2M-10	8.20	68.00	7.50	4.00
MGV0603100M-10	10.00	105.00	7.00	3.00

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)

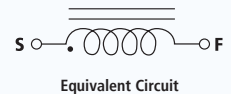
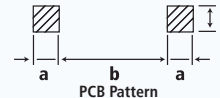
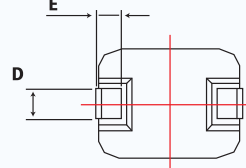
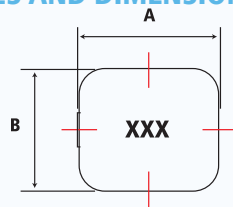
4 Saturation Current is the DC current at which the inductance drop off approximate 25% from its value without current. (ambient temperature 25 $\pm$ 5°C)

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

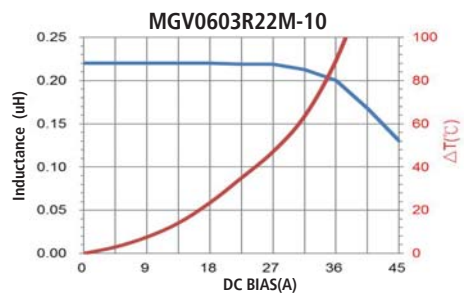
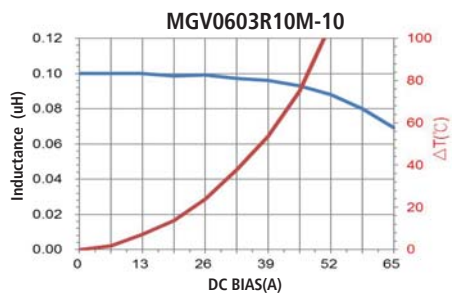
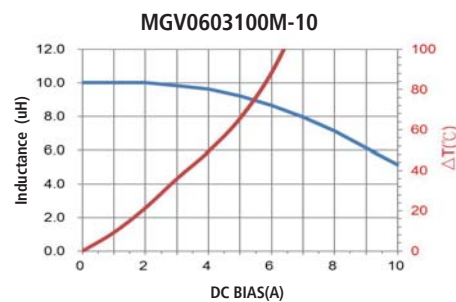
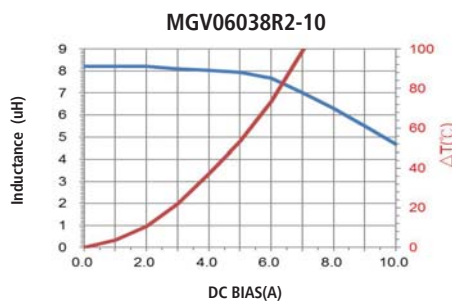
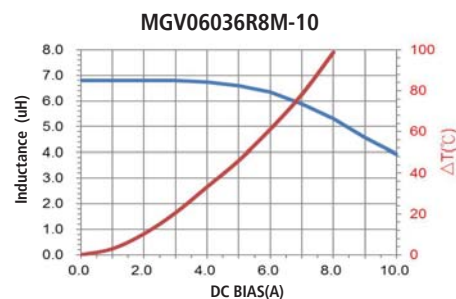
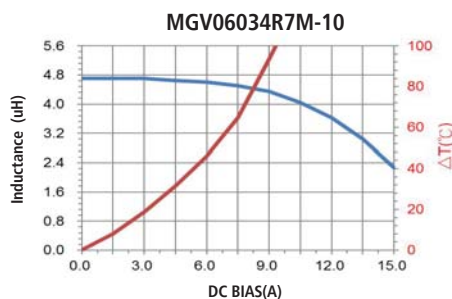
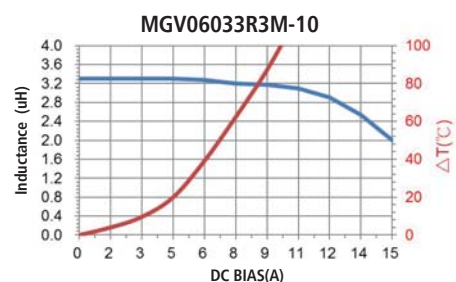
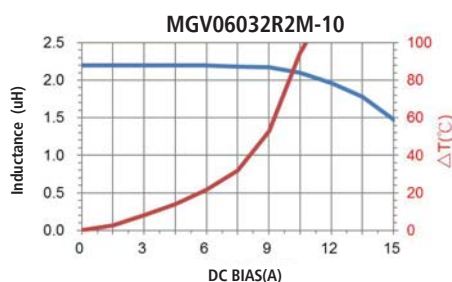
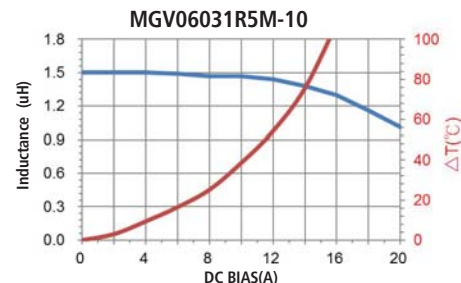
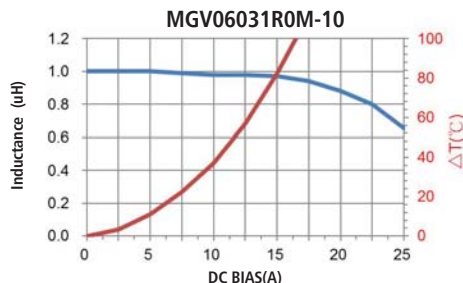
Unit: mm



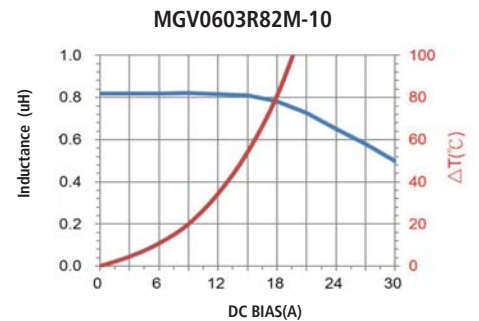
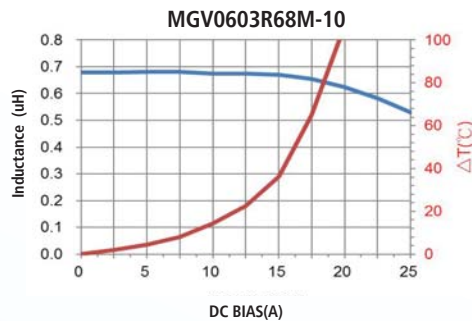
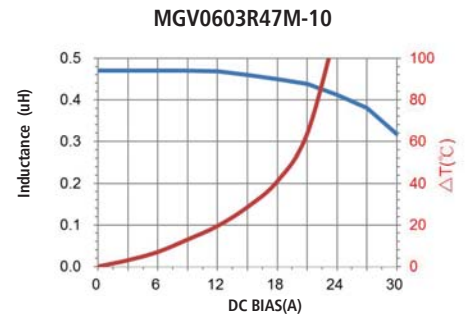
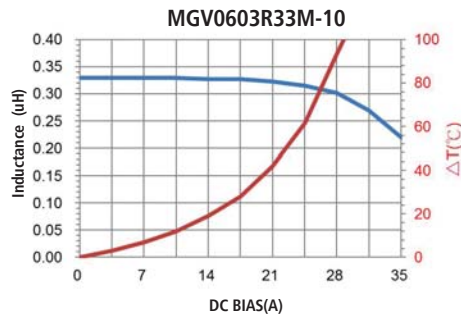
A	B	C	D	E	a	b	c
7.3 $\pm$ 0.5	6.7 $\pm$ 0.3	3.0 $\pm$ 0.3	2.9 $\pm$ 0.3	1.6 $\pm$ 0.5	2.5ref	3.7ref	3.5ref

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

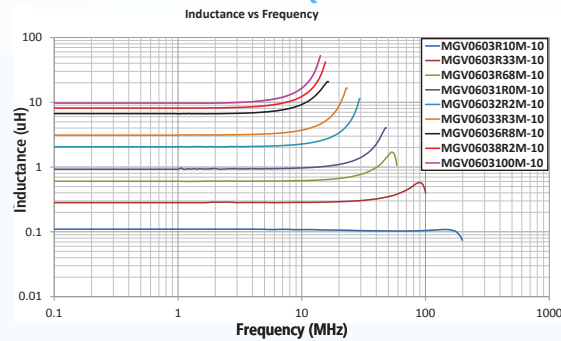
TYPICAL ELECTRICAL CHARACTERISTICS



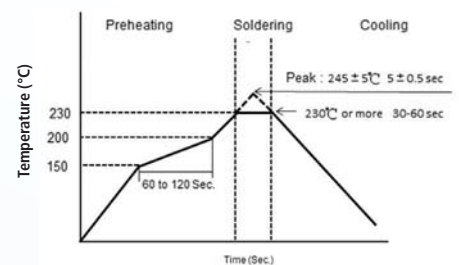
TYPICAL ELECTRICAL CHARACTERISTICS



INDUCTANCE VS FREQUENCY CURVE



TEMPERATURE PROFILE OF REFLOW SOLDERING.



ORDERING INFORMATION

PART NUMBER EXAMPLE

M	G	V	0	6	0	3	4	R	7	M	-	1	0
Product series code			Part size code			Inductance value code (i.e. 4R7: 4.7uH)			Tolerance % (i.e. M: $\pm 20\%$ • N: $\pm 30\%$)		PB free code (i.e. 10: PB free)		

PACKAGING INFORMATION

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