



### 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

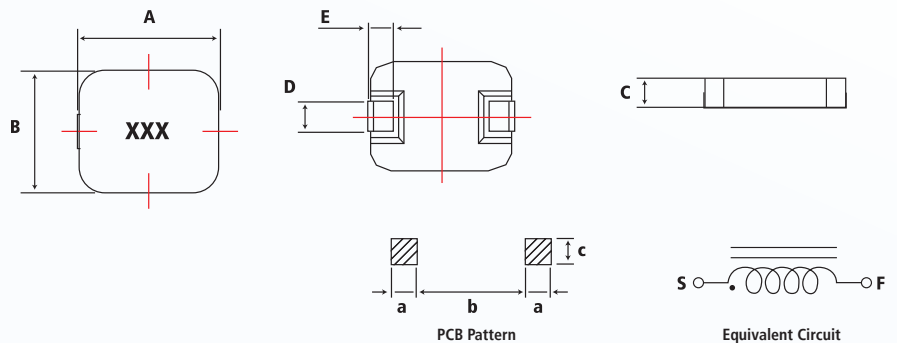
### ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) MAX	SATURATION CURRENT <sup>4</sup> (A) MAX	RMS CURRENT <sup>3</sup> (A) MAX
MGV1004R19M-10	0.19	1.0	90.0	40.0
MGV1004R36M-10	0.36	1.4	60.0	31.5
MGV1004R47M-10	0.47	1.6	53.0	28.5
MGV1004R56M-10	0.56	1.8	49.0	27.5
MGV1004R0M-10	1	4.1	36.0	17.5
MGV1004R5M-10	1.5	5.8	27.5	15.0
MGV1004R2M-10	2.2	9.0	25.6	12.0
MGV1004R3M-10	3.3	11.8	18.6	10.0
MGV1004R7M-10	4.7	16.5	17.0	9.5
MGV1004R6M-10	5.6	19.3	16.0	8.5
MGV1004R8M-10	6.8	23.3	13.5	8.0
MGV1004R10M-10	10	36.5	12.0	6.8

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.)

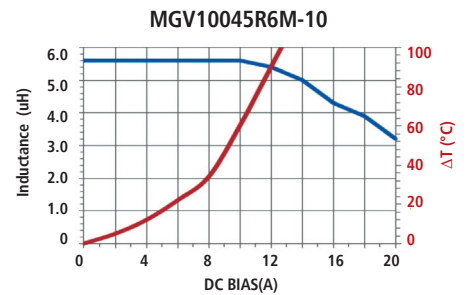
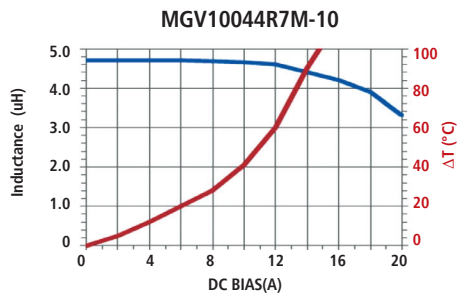
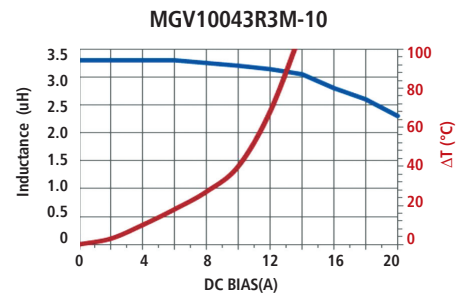
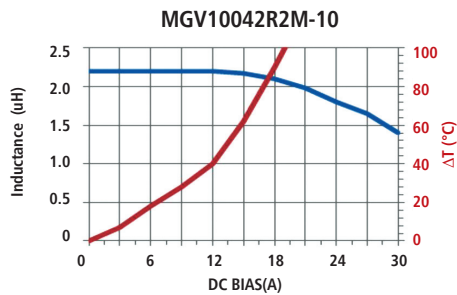
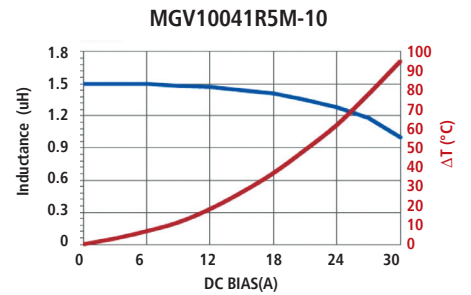
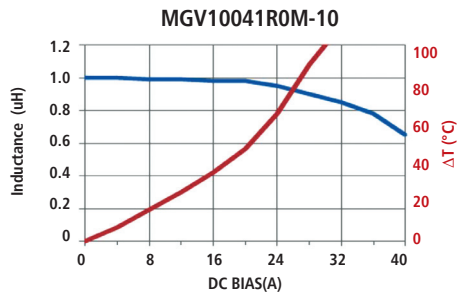
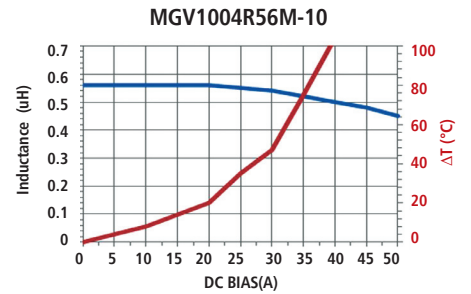
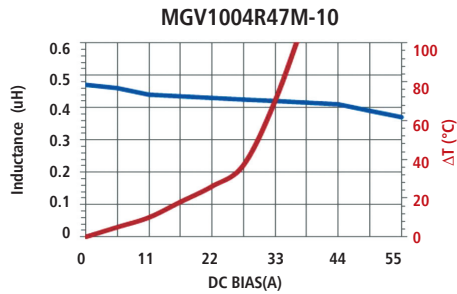
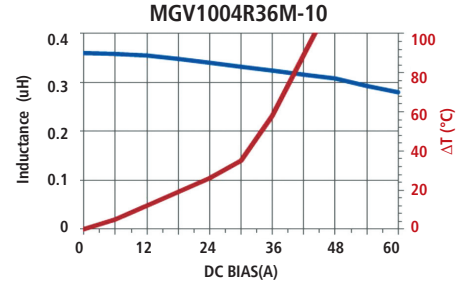
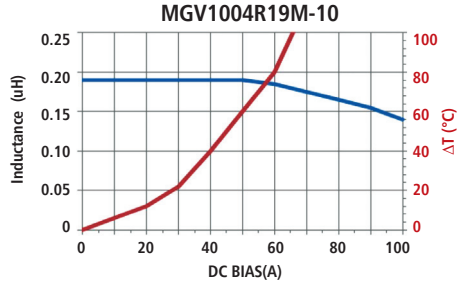
### SHAPES AND DIMENSIONS Unit: mm



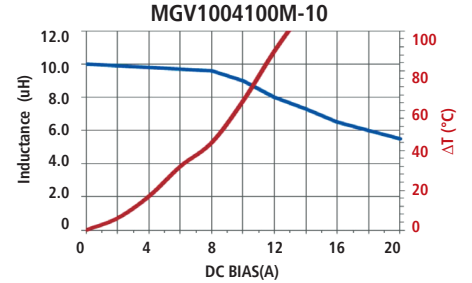
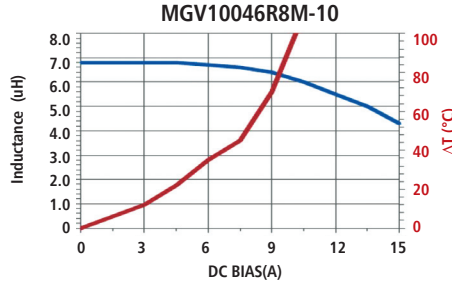
A	B	C	D	E	a	b	c
11.0 $\pm$ 0.5	10.0 $\pm$ 0.3	4.0 $\pm$ 0.3	2.9 $\pm$ 0.5	2.2 $\pm$ 0.5	3.5ref	6.0ref	4.0ref

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

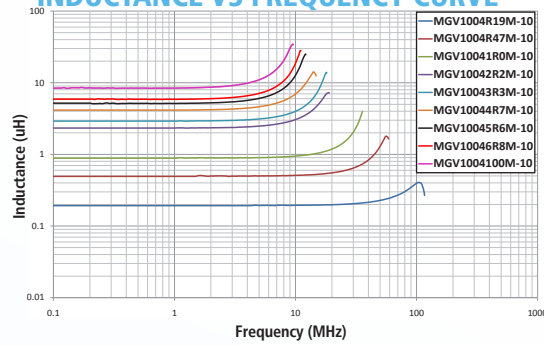
**TYPICAL ELECTRICAL CHARACTERISTICS**



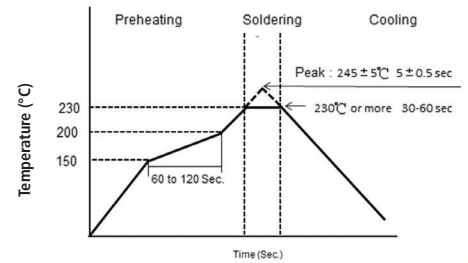
**TYPICAL ELECTRICAL CHARACTERISTICS**



**INDUCTANCE VS FREQUENCY CURVE**



**TEMPERATURE PROFILE OF REFLOW SOLDERING.**



**ORDERING INFORMATION**

**PART NUMBER EXAMPLE**

M	G	V	1	0	0	4	4	R	7	M	-	1	0
Product series code			Part size code			Inductance value code (i.e. 4R7: 4.7uH)			Tolerance % (i.e. M: ±20%)	PB free code (i.e. 10: PB free)			

**PACKAGING INFORMATION**

- Standard Tape and Reel Quantity (PCS) = 1000
- Reel Size = 13 inches