



**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

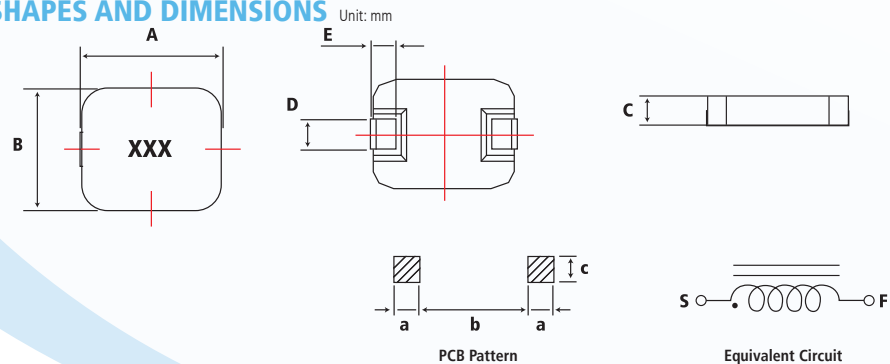
**ELECTRICAL CHARACTERISTICS**

PART NO.	INDUCTANCE ( $\mu\text{H} \pm 20\%$ )	DCR ( $\text{m}\Omega$ ) MAX	SATURATION CURRENT <sup>4</sup> (A) MAX	RMS CURRENT <sup>3</sup> (A) MAX
MGV0625R10M-10	0.10	1.70	50.0	30.0
MGV0625R22M-10	0.22	3.20	34.0	21.0
MGV0625R33M-10	0.33	4.10	22.0	18.0
MGV0625R47M-10	0.47	6.50	21.0	13.5
MGV0625R68M-10	0.68	9.40	18.0	11.0
MGV0625R82M-10	0.82	11.80	17.0	10.0
MGV06251R0M-10	1.00	14.20	16.0	9.0
MGV06251R5M-10	1.50	21.20	15.0	7.5
MGV06252R2M-10	2.20	34.00	14.0	6.5
MGV06253R3M-10	3.30	51.60	13.0	5.0
MGV06254R7M-10	4.70	63.00	10.0	4.5
MGV06256R8M-10	6.80	95.00	8.0	3.5
MGV06258R2M-10	8.20	106.00	7.0	3.0
MGV0625100M-10	10.00	129.00	6.0	2.5

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

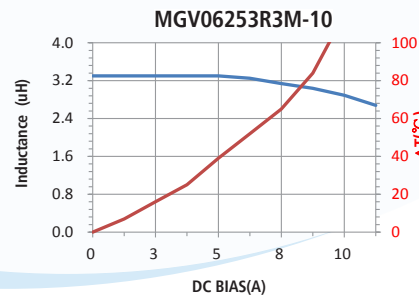
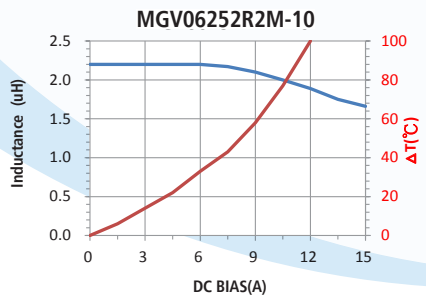
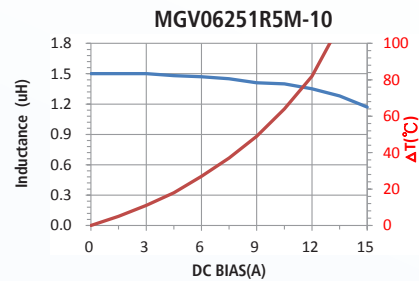
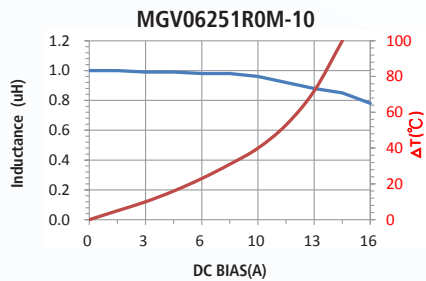
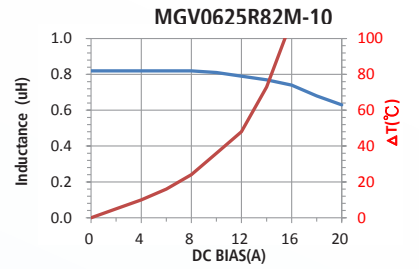
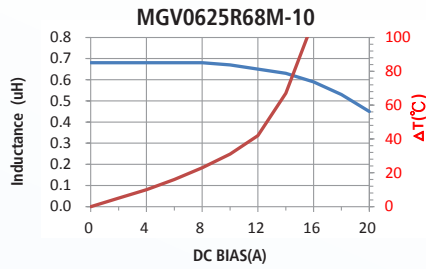
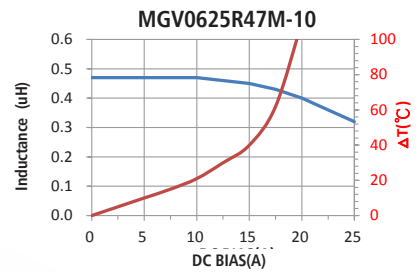
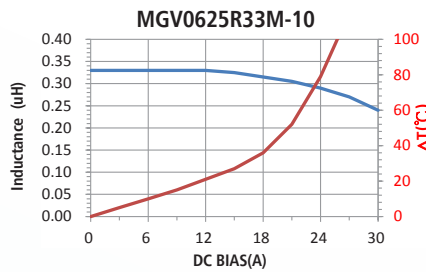
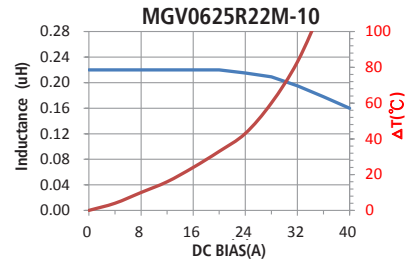
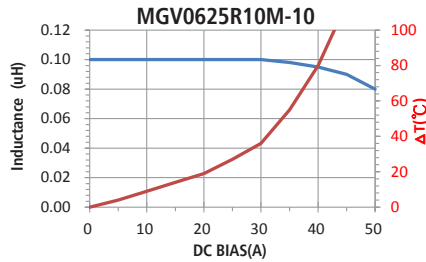
**SHAPES AND DIMENSIONS**



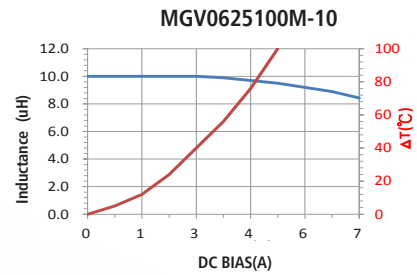
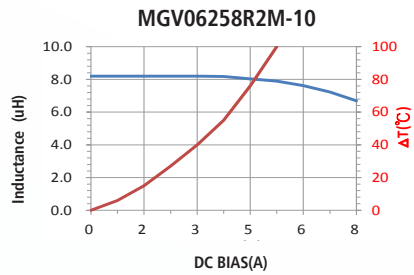
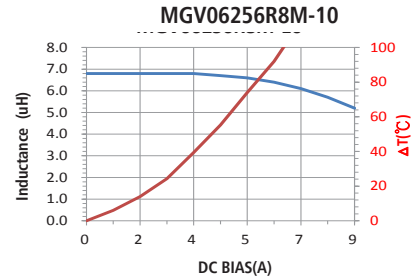
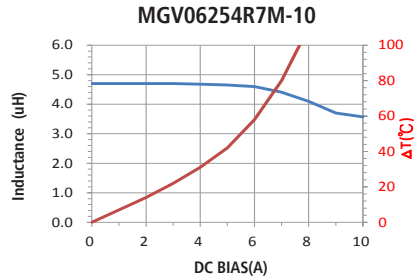
A	B	C	D	E	a	b	c
7.3 $\pm$ 0.5	6.7 $\pm$ 0.3	2.5 $\pm$ 0.3	2.9 $\pm$ 0.3	1.6 $\pm$ 0.5	2.5 ref	3.7 ref	3.5 ref

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

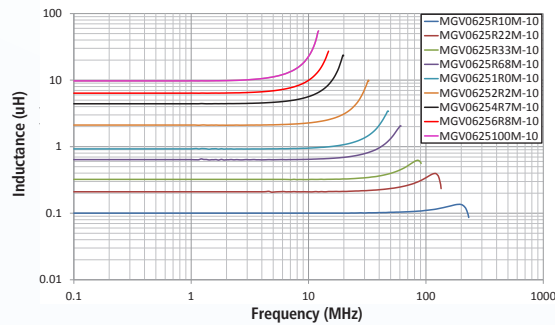
**TYPICAL ELECTRICAL CHARACTERISTICS**



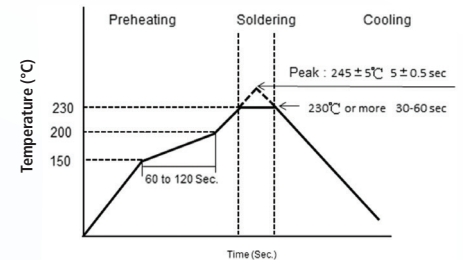
## TYPICAL ELECTRICAL CHARACTERISTICS



## INDUCTANCE VS FREQUENCY CURVE



## TEMPERATURE PROFILE OF REFLOW SOLDERING



## ORDERING INFORMATION

### PART NUMBER EXAMPLE

M	G	V	0	6	2	5	1	R	5	M	-	1	0
Product series code			Part size code			Inductance value code <small>(i.e. 1R5: 1.5uH)</small>			Tolerance % <small>(i.e. M: ±20%)</small>	PB free code <small>(i.e. 10: PB free)</small>			

## PACKAGING INFORMATION

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