

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Smart Technology. Delivered.

# **MGV0603**

### **SMD Power Inductor Series**



### **FEATURES ✓** RoHS

- Shielded structure
- Low DCR with high efficiency
- Large current with small size
- High reliability
- AEC-Q200 qualified
- RoHS compliant

### **APPLICATIONS**

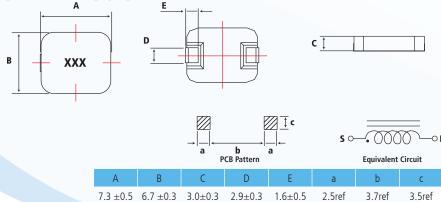
- DC-DC power supply and noise filter circuits
- Tablet, notebook PC, workstation and server etc
- Telecom for basestation etc
- LED lighting
- Automotive

#### **ELECTRICAL CHARACTERISTICS**

PART NO.	INDUCTANCE (µH ± 20%)	DCR (mΩ) MAX	SATURATION CURRENT <sup>4</sup> (A) MAX	RMS CURRENT <sup>3</sup> (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: ±20%
- Inductance tested at 100KHz, 0.25V
- RMS Current is defined based on temperature rise approximate 40°C without core loss (ambient temperature 25±5°C)
  Saturation Current is the DC current at which the inductance drop off approximate 25% from its value without current. (ambient temperature 25±5°C)
- Operate temperature range -40°C ~ +125°C (including self-temperature rise)
- Storage temperature range: (packaging conditions): 25±5°C and RH 70%(MAX.)

### SHAPES AND DIMENSIONS Unit: mm



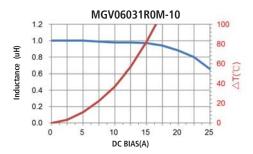
USA: +1.866.928.8181 Europe: +49.0.8031.2460.0 Asia: +86.755.2714.1166

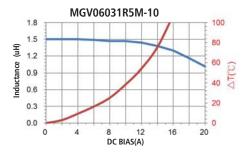


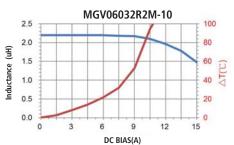
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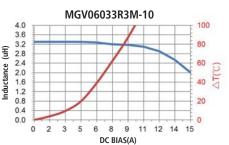
# **SMD Power Inductor Series**

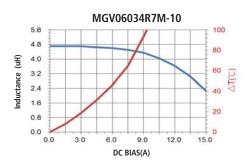
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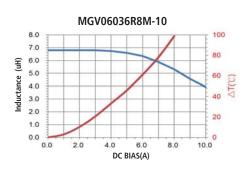


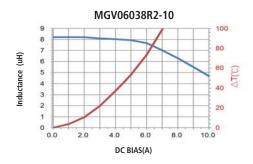


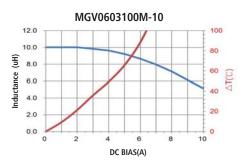


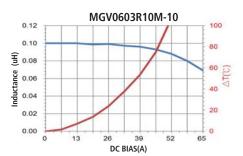


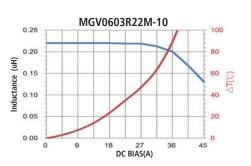










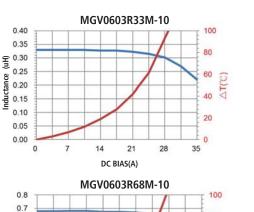


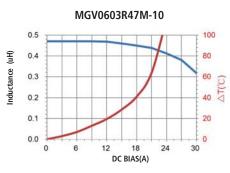


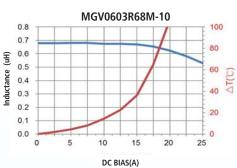
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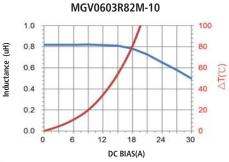
### **SMD Power Inductor Series**

#### TYPICAL ELECTRICAL CHARACTERISTICS

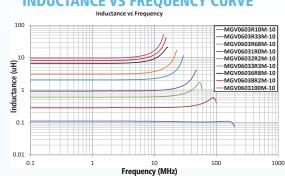




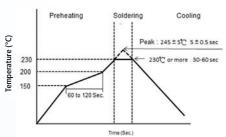




### **INDUCTANCE VS FREQUENCY CURVE**

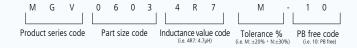


# TEMPERATURE PROFILE OF REFLOW SOLDERING.



### **ORDERING INFORMATION**

#### PART NUMBER EXAMPLE



#### **PACKAGING INFORMATION**

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