

# MOLDING SMD POWER INDUCTOR MHAF0530SG SERIES



### **Features**

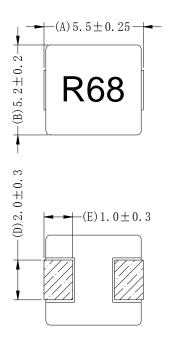
- RoHS compliant
- Magnetic shield construction
- CompositeMagnetic powder core
- C Handle transient current spikes without saturation
- Ultra low buzz noise due to composite construction
- Moisture Sensitivity Level (MSL): 1
- © Excellent temperature stability for inductance and saturation
- AEC-Q200 Grade 0 qualified ( 55°C to +155°C ambient)
- Operating temperature rang(Including temperature rise):
  - -55°C to +155°C

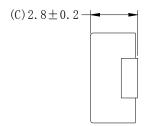


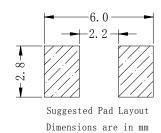
## **Applications**

- Airbag
- LED lighting
- High current power supplies
- ADAS, Infotainment system

### **Mechanical Dimensions** (Units:mm)







## **Electrical Spescifications**

Part Number	L ( μH)	DCR $(m\Omega)$		Irms (A)	Isat (A)
		Тур.	Max.	Irms (A)	ISat (A)
MHAF0530SGR10M	$0.10 \pm 20\%$	2.30	2.76	12.0	25.0
MHAF0530SGR22M	$0.22 \pm 20\%$	3.60	4.32	9.50	16.0
MHAF0530SGR33M	$0.33 \pm 20\%$	4.40	5.28	8.50	14.0
MHAF0530SGR47M	$0.47 \pm 20\%$	5.10	6.12	7.70	12.5
MHAF0530SGR68M	$0.68 \pm 20\%$	7.50	9.00	6.50	11.0
MHAF0530SG1R0M	1.00±20%	9.00	10.8	6.00	9.50
MHAF0530SG1R5M	$1.50 \pm 20\%$	15.0	18.0	4.50	8.50
MHAF0530SG2R2M	2.20±20%	21.5	25.8	3.80	7.50
MHAF0530SG3R3M	3.30±20%	30.0	36.0	3.20	6.50

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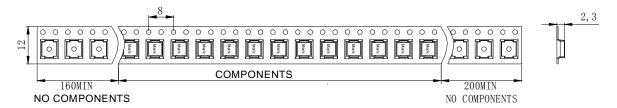
MHAF0530SG4R7M	4.70±20%	46.0	55.2	2.60	5.50
MHAF0530SG5R6M	5.60±20%	50.0	60.0	2.40	4.50
MHAF0530SG6R8M	$6.80 \pm 20\%$	64.0	76.8	2.20	4.00
MHAF0530SG100M	10.0±20%	114	137	1.60	3.00

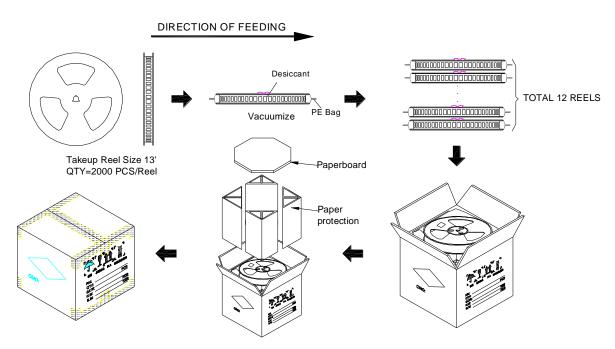
#### Notes:

- 1.All of the electrical spescifications are test at 25  $^{\circ}\mathrm{C}_{\scriptscriptstyle{7}}$  inductance test at 100KHz/0.25V.
- 2. Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
- 3. Isat is the DC current at which inductance drop approximately 30% from its value without current.
- 4. The part temperature(ambient + temp.rise) should not exceed 155°C under worst case operating conditions. Circuit design,component placement,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature.Part temperature should be verified in the end application.
- 5. Due to product improvement, Product specificationsMay be changed discontinuously without advance notice.

  Please contact with sales representatives or product engineers, and theMentech product approval sheet shall be obtained before ordering.

### Packaging Spescifications (Units:mm)





2000Pcs/Reel	12Reels/Carton		
2000FCS/Reel	24000Pcs/Carton		

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