

## **MOLDING SMD POWER INDUCTOR** MHAF1054SG SERIES



#### **Features**

- C RoHS compliant
- 0 Magnetic shield construction
- 0 Composite magnetic powder core
- 0 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) C
- Operating temperature rang(Including temperature rise):

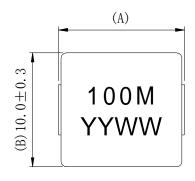
-55°C to +155°C

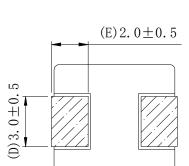


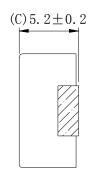
### **Applications**

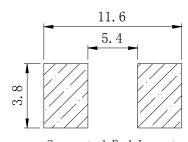
- C Airbag
- LED lighting
- C High current power supplies
- 0 ADAS, Infotainment system

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









Suggested Pad Layout Dimensions are in mm



	(A)		
R68-	2R2	$11.1 \pm 0.4$	
2R5-	-330	$10.8 \pm 0.3$	

## **Electrical Spescifications**

Part Number	L ( μH)	DCR $(m\Omega)$		Irms (A)	loot (A)
		Тур.	Max.	Irms (A)	Isat (A)
MHAF1054SGR68M	0.68	1.45	1.75	29.0	33.0
MHAF1054SG1R0M	1.00	1.85	2.25	24.0	28.0
MHAF1054SG1R5M	1.50	2.70	3.20	21.0	26.0
MHAF1054SG2R2M	2.20	4.00	4.80	18.5	24.0
MHAF1054SG2R5M	2.50	5.00	5.70	15.5	25.4
MHAF1054SG3R3M	3.30	6.90	7.90	13.1	22.7
MHAF1054SG3R3MA	3.30	7.20	8.30	14.0	21.0

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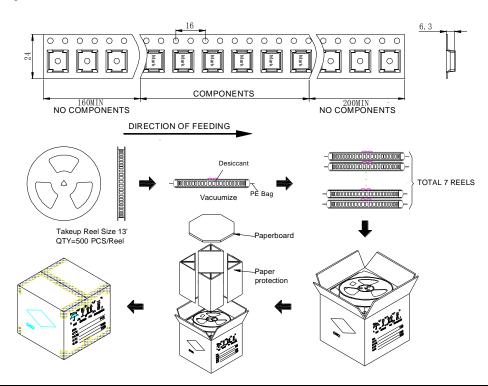
MHAF1054SG4R7M	4.70	9.50	11.0	11.5	17.5
MHAF1054SG6R8M	6.80	16.0	18.0	9.00	15.0
MHAF1054SG100M	10.0	22.0	26.2	7.50	10.7
MHAF1054SG100MA	10.0	25.0	28.0	7.00	13.0
MHAF1054SG150M	15.0	31.0	37.0	6.50	9.50
MHAF1054SG150MA	15.0	38.0	45.5	5.80	11.0
MHAF1054SG220M	22.0	48.0	55.0	5.20	7.00
MHAF1054SG330M	33.0	70.0	80.0	4.30	6.00

#### Notes:

- 1.All of the electrical spescifications are test at 25  $^{\circ}$ C, 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)



500Pcs/Reel	7Reels/Carton
Sourcs/ Neel	3500Pcs/Carton

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