

### Features

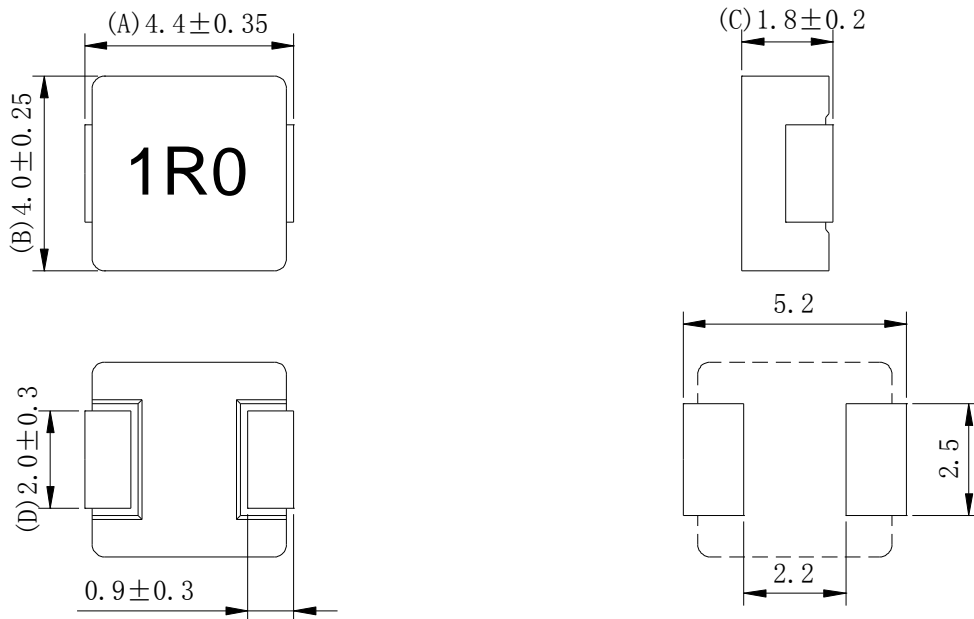
- Ⓢ RoHS compliant
- Ⓢ Magnetic shield construction
- Ⓢ CompositeMagnetic powder core
- Ⓢ Handle transient current spikes without saturation
- Ⓢ Ultra low buzz noise due to composite construction
- Ⓢ Moisture Sensivity Level (MSL): 1
- Ⓢ Excellent temperature stability for inductance and saturation
- Ⓢ Operating temperature rang(Including temperature rise):  
-55°C to +125°C

### Applications

- Ⓢ DC/DC converters
- Ⓢ Battery powered devices
- Ⓢ Low profile ,high current power supplies
- Ⓢ PDA/notebook/desktop/server applications



### Mechanical Dimensions (Units:mm)



Suggested PAD Layout

### Electrical Specifications

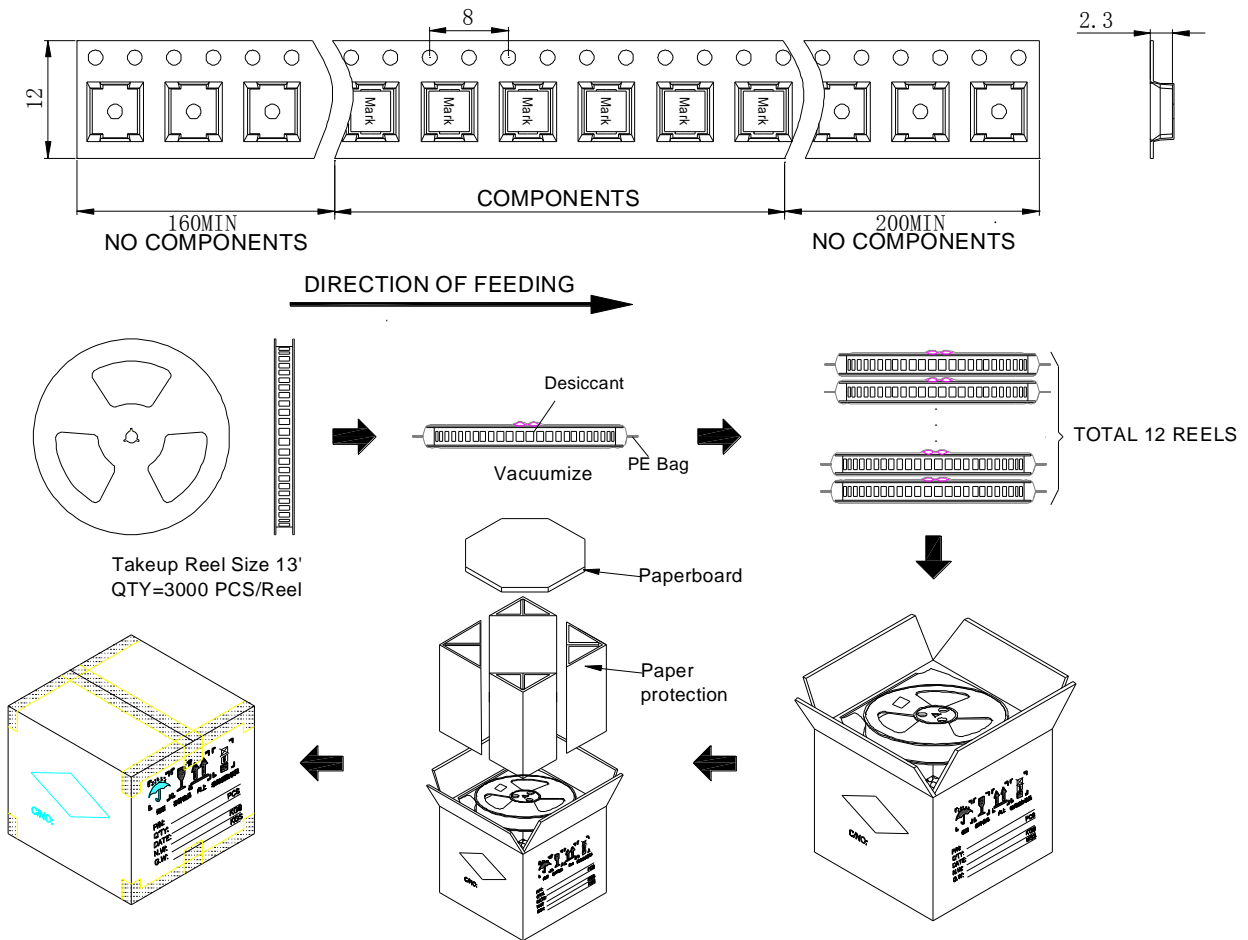
Part Number	L ( $\mu$ H )	DCR ( m $\Omega$ )		Irms ( A )	Isat ( A )
		Typ.	Max.		
MHA0420NSGR10M	0.10 $\pm$ 20%	3.80	4.45	8.00	22.0
MHA0420NSGR22M	0.22 $\pm$ 20%	6.60	7.90	6.00	13.5
MHA0420NSGR33M	0.33 $\pm$ 20%	8.80	10.5	5.30	12.0
MHA0420NSGR47M	0.47 $\pm$ 20%	10.0	12.0	5.00	9.50
MHA0420NSGR56M	0.56 $\pm$ 20%	13.0	15.6	4.50	9.00
MHA0420NSGR68M	0.68 $\pm$ 20%	15.0	18.0	4.00	8.00
MHA0420NSG1R0M	1.00 $\pm$ 20%	22.5	27.0	3.40	7.00
MHA0420NSG1R5M	1.50 $\pm$ 20%	31.5	37.8	2.90	6.00

MHA0420NSG2R2M	2.20 ± 20%	49.0	58.8	2.40	5.00
MHA0420NSG3R3M	3.30 ± 20%	83.0	100	1.80	4.00
MHA0420NSG4R7M	4.70 ± 20%	110	130	1.60	3.00
MHA0420NSG5R6M	5.60 ± 20%	130	155	1.50	2.80
MHA0420NSG6R8M	6.80 ± 20%	145	174	1.40	2.50
MHA0420NSG8R2M	8.20 ± 20%	170	204	1.20	2.00
MHA0420NSG100M	10.0 ± 20%	225	270	1.00	1.80

**Notes:**

1. All of the electrical specifications are test at 25°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 125°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 specifications May 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 Specifications (Units:mm)**



3000Pcs/Reel	12 Reels/Carton
	36000Pcs/Carton