



**Rated current:** Isat(max.) or Irms(max.), whichever is smaller.

**Saturation Current:** Max. Value, DC current at which the inductance drops less than 30% from its value without current; Typ. Value, DC current at which the inductance drops 30% from its value without current

**Irms:** DC current that causes the temperature rise ( $\Delta T$ ) from 20°C ambient. For Max. Value,  $\Delta T < 40^\circ\text{C}$ ; for Typ. Value,  $\Delta T$  is approximate 40°C. 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.

Absolute maximum voltage: DC 20V

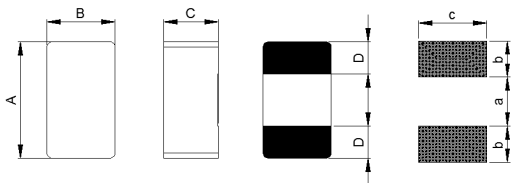
**Operating temperature range:** -40°C ~ +125°C (Including self-heating).

**Storage temperature range:** -40°C ~ +125°C

## Electrical Specifications @ 25°C

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current	
	1MHz/1V	Max.	Typ.	Max.	Typ.	Max.	Typ.
Units	uH	mΩ	mΩ	A	A	A	A
Symbol	L	DCR		Isat		Irms	
MHT201208SG-R24M H	0.24 ± 20%	26	20	5.50	6.00	4.50	4.80
MHT201208SG-R47M H	0.47 ± 20%	42	37	4.50	4.80	3.60	3.80
MHT201208SG-1R0M H	1.0 ± 20%	79.2	60	2.80	3.20	2.30	2.50
MHT201208SG-1R5M H	1.5 ± 20%	130	103	2.40	2.80	1.90	2.20
MHT201208SG-2R2M H	2.2 ± 20%	220	180	2.20	2.50	1.40	1.80

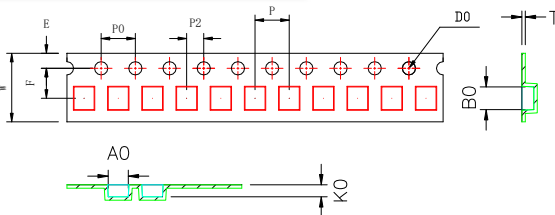
## MECHANICAL



A	B	C	D	a	b	c
2.0 ± 0.2	1.2 ± 0.2	0.8 Max	0.60 ± 0.2	0.7 Ref	0.8 Ref	1.2 Ref

Dimensions (mm)

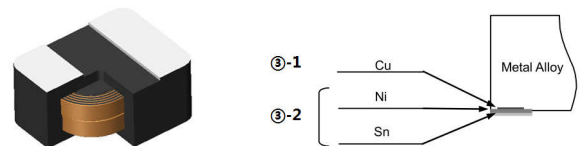
## TAPING AND PACKING



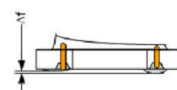
ITEM	W	A0	B0	K0	P	F	E	D0	P0	P2	T
<b>DIM</b>	8.00	1.3	2.3	1.00	4.00	3.5	1.75	1.50	4.00	2.00	0.20
<b>TOLE</b>	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	±0.1	±0.1	±0.05

**Quantity (pcs):**  
3000 PCS PER REEL  
9 REELS PER CARTON  
27000 PCS PER CARTON

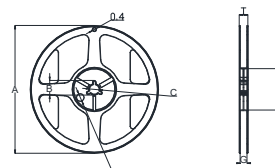
## STRUCTURE



NO.	Components	Material
①	Core	Soft magnetic Metal
②	Wire	Polyurethane system enameled copper wire
③-1	Electrodes	Inside Cu
③-2		Ni+Sn Plating Chemicals



Af: Clearance between terminal and the surface of plate must be 0.12mm max when coil is placed on a flat plat



Type	A	B	C	G	N	T
8mm	178	20.7 ± 0.8	13 ± 0.4	9	60	10.8

Dimensions in mm