

# APPROVAL SPECIFICATION

**PRODUCT NAME:**

**KOOMAG PN:**KMTC1050 Series

**CUSTOMER PN:**

## CUSTOMER RESPONSE

<input type="checkbox"/> Approval <input type="checkbox"/> Approval with the following changes <input type="checkbox"/> Reject		
APPROVED BY	SIGNATURE	DATE

## KOOMAG ENGINEERING SIGNATURE

APPROVED BY	CHECKED BY	ISSUED BY
DATE	DATE	DATE

深圳坤磁科技有限公司

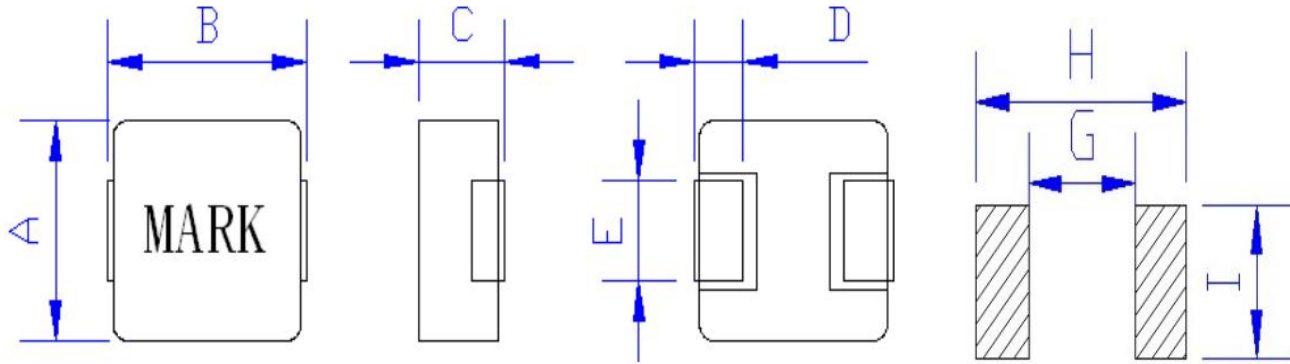
SHENZHEN KOOMAG TECHNOLOGY CO., LTD

Address: B503, Building B, HuaChuangDa Headquarters Building, Bao'an 49 District, Shenzhen

## General Description

This specification applies to the KMTC1050 Series of wire wound SMD power inductor.

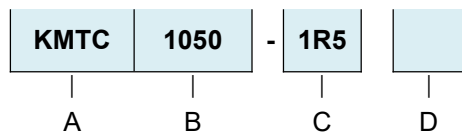
## Appearance & Shape



## Dimension (Unit:mm)

NO	Series	A	B	C	D	E	G	H	I
1	KMTC1050	10.2 ±0.3	11±0.5	5.0 Max	2.0±0.5	3.0±0.3	6.0 Ref.	11.8 Ref.	3.5 Ref.

## Part Number



A:Series name (产品品名)

B:Dimensions (产品尺寸)

C:Inductance value (电感值) 1R5: 1.5μH 220: 22μH

D:Tolerance (误差值) K: ±10%; M: ±20%; N: ±30%

## Electrical Characteristics

Please refer to Item 5.

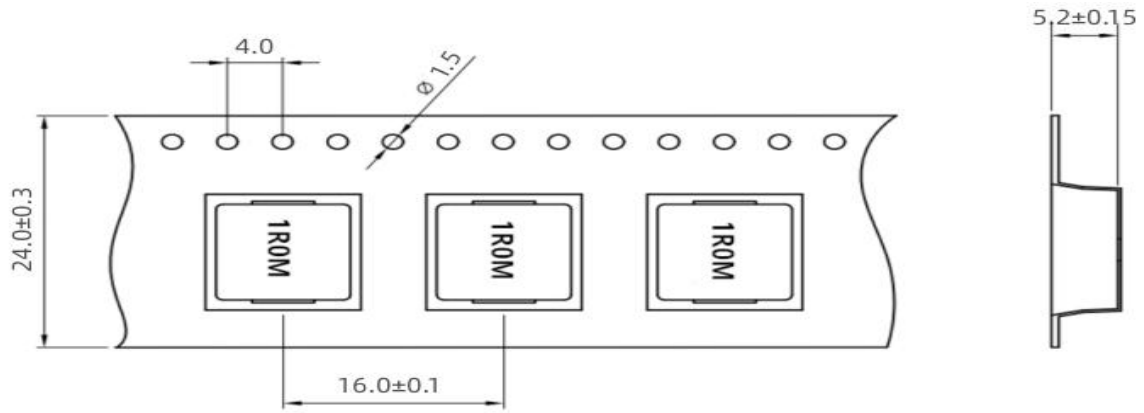
- 1). Operating temperature range (individual chip without packing):  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  .
- 2). Storage temperature range (packaging conditions):  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  and RH 70% (Max.).
- 3). Rating DC current: Temperature rise( $\Delta T$ ) is  $40^{\circ}\text{C}$  approximately at Irms.
- 4). Saturation DC current: Inductance drop approximately 30% of L0 at Isat.

NO	Part Number	Inductance	DC Resistance		Saturation Current	Temp.Rise current	Marking
		100KHz/1.0V	Max.	Typ.	Typ.	Typ.	
	Units	( $\mu\text{H}$ )	m $\Omega$	m $\Omega$	A	A	
1	KMTC1050-R72M	0.72 $\pm$ 20%	2.8	1.95	32.0	25.0	R72
2	KMTC1050-1R0M	1.00 $\pm$ 20%	3.2	2.1	25.0	14.0	1R0
3	KMTC1050-1R5M	1.50 $\pm$ 20%	5.8	4.3	20.0	12.0	1R5
4	KMTC1050-2R2M	2.20 $\pm$ 20%	7.5	5.0	20.0	12.0	2R2
5	KMTC1050-4R7M	4.70 $\pm$ 20%	18	12	15.0	8.0	4R7
6	KMTC1050-6R8M	6.80 $\pm$ 20%	27	19.4	14.0	7.0	6R8
7	KMTC1050-100M	10.00 $\pm$ 20%	44	25.5	12.0	6.0	100
8	KMTC1050-150M	15.00 $\pm$ 20%	54	36	10.0	5.0	150
9	KMTC1050-220M	22.00 $\pm$ 20%	85	60	8.0	4.5	220
10	KMTC1050-330M	33.00 $\pm$ 20%	90	76	6.0	4.0	330
11	KMTC1050-470M	47.00 $\pm$ 20%	145	110	5.0	3.5	470
12	KMTC1050-680M	68.00 $\pm$ 20%	195	155	4.5	2.5	680
13	KMTC1050-101M	100.00 $\pm$ 20%	285	240	3.5	2.0	101
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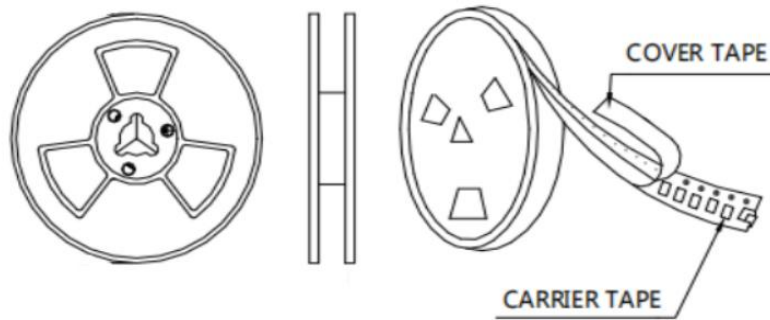
※Design as Customer's Requested Specifications. (可按顾客的特殊需求设计)

## ■ Packaging(unit:mm)

### 1.Tape Dimensions(Unit:mm)



### 2.Reel



Part No.	Tape	MPQ
KMTC1050	Embossed Tape	800PCS

## Soldering Condition Sproduct

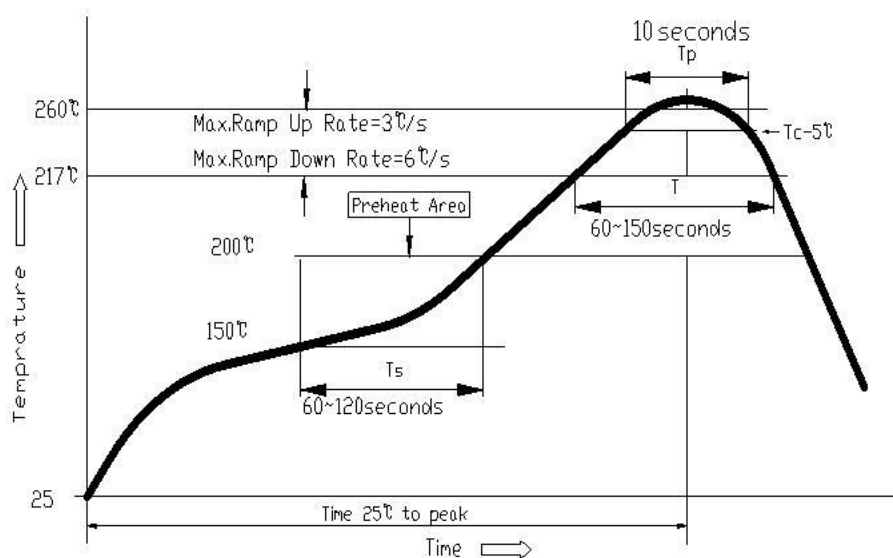
Applicable soldering process to the products is refl.

### 1.Soldering Materials

(1)Solder:Sn-3.0Ag-0.5Cu

(2)Flux:Use rosin-based flux,but not strongly acidic flux (with xhlorine exceeding 0.2wt%).Do not use water-soluble flux.

### 2.Reflow Soldering Profile



### 3.Solderin glron

Reworking with electric soldering iron must preheating at 150°C for 1 minute is required,and do not directly touch the core with the tip of the soldering iron.The reworking soldering conditions are as follows.

- ① Temperature of soldering iron tip:350°C ;
- ② Soldering iron power output:≤30W;
- ③ Diameter of soldering iron end:≤1.0mm;
- ④ Soldering time: < 3s.

