

# APPROVAL SPECIFICATION

**PRODUCT NAME:**

**KOOMAG PN:**KMTC252010 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

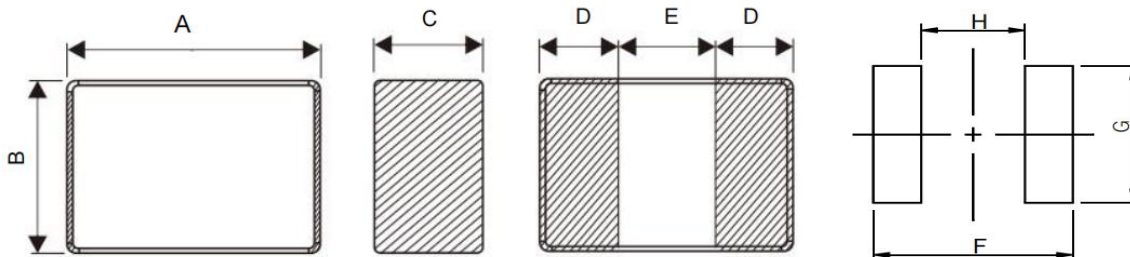
深圳坤磁科技有限公司  
 SHENZHEN KOOMAG TECHNOLOGY CO., LTD

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

## General Description

This specification applies to the KMTC252010 Series of wire wound SMD power inductor.

## Appearance & Shape



## Dimension (Unit:mm)

NO	Series	A	B	C	D	E	F	G	H
1	KMTC252010	2.5±0.3	2.0±0.3	1.0 Max	0.7typ	1.1typ	3.0typ	2.4typ	0.9typ

## Part Number

KMTC	252010	S	-	1R5	
A	B	C		D	E

A:Series name (产品品名)

B:Dimensions (产品尺寸)

C:Material code (物料代码)

D:Inductance value (电感值) 1R5: 1.5μH 221: 220μH

E:Tolerance (误差值) M: ±20%; N: ±30%

## Electrical Characteristics

Please refer to Item 5.

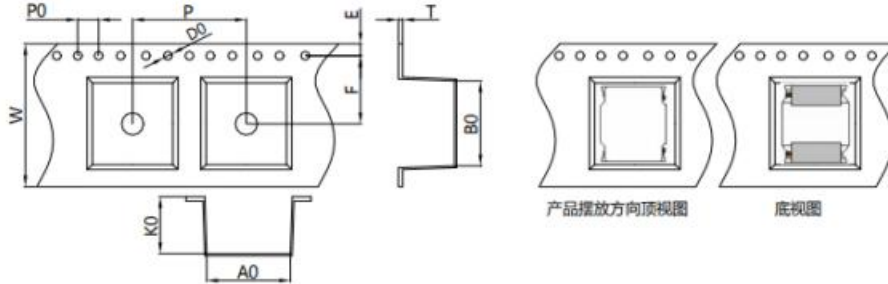
- 1). Operating temperature range (individual chip without packing):  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  .
- 2). Storage temperature range (packaging conditions):  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  and RH 70% (Max.).
- 3). Rating DC current: Temperature rise( $\Delta T$ ) is  $40^{\circ}\text{C}$  approximately at  $I_{rms}$ .
- 4). Saturation DC current: Inductance drop approximately 30% of  $L_0$  at  $I_{sat}$ .

NO	Part Number	Inductance	DC Resistance		Isat(A)		Irms(A)		Marking
		100KHz/1.0V	Max.	Typ.	Max.	Typ.	Max.	Typ.	
	Units	( $\mu\text{H}$ )	$\Omega$	$\Omega$	A	A	A	A	
1	KMTC252010S-R22M	0.22 $\pm$ 20%	0.012	0.008	7.60	8.20	6.50	7.50	N/A
2	KMTC252010S-R33M	0.33 $\pm$ 20%	0.024	0.018	6.30	6.80	5.50	6.00	N/A
3	KMTC252010S-R47M	0.47 $\pm$ 20%	0.036	0.024	5.20	6.00	5.00	5.80	N/A
4	KMTC252010S-R68M	0.68 $\pm$ 20%	0.047	0.034	4.80	5.40	4.50	5.00	N/A
5	KMTC252010S-1R0M	1.0 $\pm$ 20%	0.053	0.042	3.80	4.50	3.50	4.00	N/A
6	KMTC252010S-1R5M	1.5 $\pm$ 20%	0.089	0.075	3.50	4.00	3.00	3.50	N/A
7	KMTC252010S-2R2M	2.2 $\pm$ 20%	0.116	0.095	3.00	3.50	2.50	3.00	N/A
8	KMTC252010S-3R3M	3.3 $\pm$ 20%	0.160	0.135	2.20	2.50	1.90	2.30	N/A
9	KMTC252010S-4R7M	4.7 $\pm$ 20%	0.256	0.205	1.90	2.20	1.40	1.60	N/A
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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)



Size	Item	W	A0	B0	K0	P	T	E	F	D0	P0
252010	(mm)	8.00±0.3	2.5±0.15	2.95±0.15	1.35±0.1	4.0±0.1	0.18±0.1	1.75±0.1	3.5±0.1	1.5±0.1	4.0±0.1

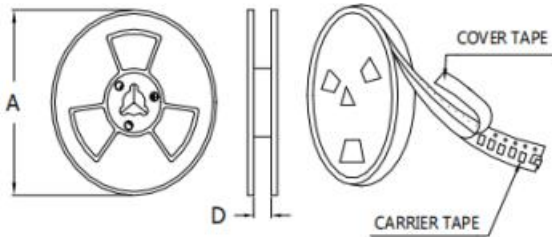
### 2.Reel



13" 盘



7" 盘



	13" 盘	7" 盘
A	Φ330±2.0	Φ178±2.0
D	8.5	

Part No.	Tape	MPQ
252010	Embossed Tape	3000PCS

## Soldering Condition Sproduct

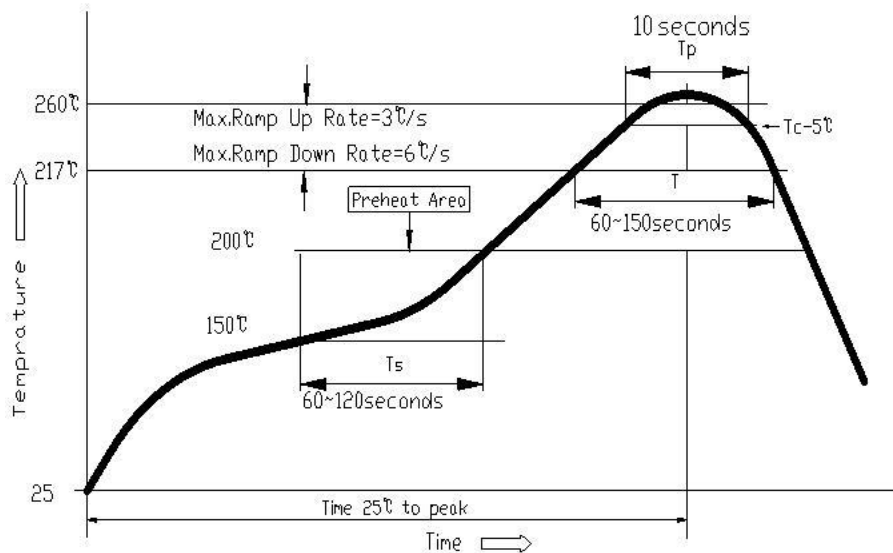
Applicable soldering process to the products is refl.

### 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.

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

