

# APPROVAL SPECIFICATION

**PRODUCT NAME:**

**KOOMAG PN:**KMTC201610 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

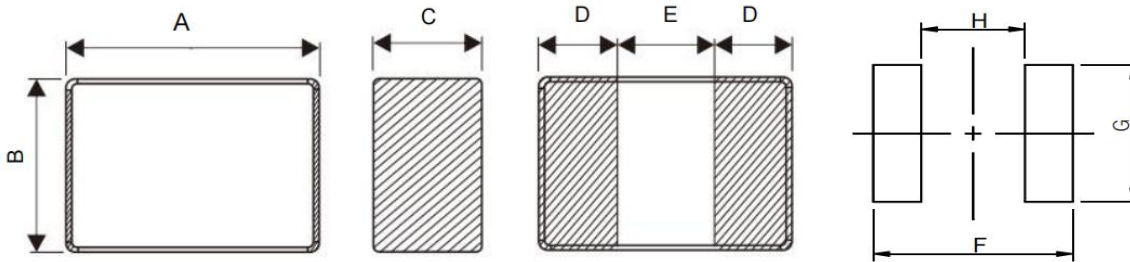
深圳坤磁科技有限公司  
 SHENZHEN KOOMAG TECHNOLOGY CO., LTD

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## General Description

This specification applies to the KMTC201610 Series of wire wound SMD power inductor.

## Appearance & Shape



## Dimension (Unit:mm)

NO	Series	A	B	C	D	E	F	G	H
1	KMTC201610	2.0±0.3	1.6±0.3	1.0 Max	0.5typ	1.0typ	2.5typ	2.0typ	0.8typ

## Part Number

KMTC	201610	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.

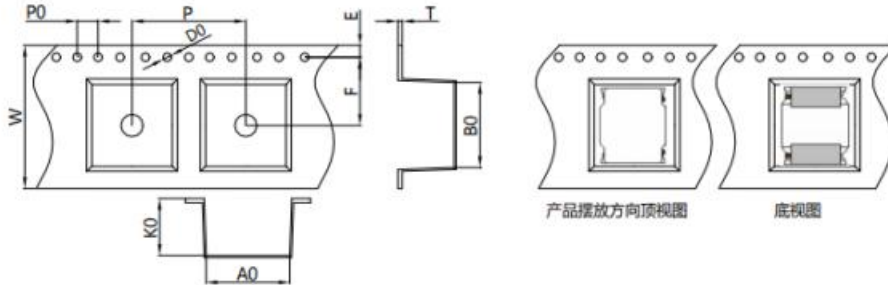
- 1). Operating temperature range (individual chip without packing):  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  .
- 2). Storage temperature range (packaging conditions):  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  and RH 70% (Max.).
- 3). Rating DC current: Temperature rise( $\Delta T$ )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

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	KMTC201610S-R24M	0.24 $\pm$ 20%	0.020	0.016	5.50	6.00	5.00	5.60	N/A
2	KMTC201610S-R33M	0.33 $\pm$ 20%	0.027	0.022	5.00	5.40	4.50	5.00	N/A
3	KMTC201610S-R47M	0.47 $\pm$ 20%	0.038	0.027	4.20	5.00	3.80	4.20	N/A
4	KMTC201610S-R68M	0.68 $\pm$ 20%	0.047	0.037	3.90	4.50	3.40	4.00	N/A
5	KMTC201610S-1R0M	1.0 $\pm$ 20%	0.065	0.057	3.20	4.00	3.00	3.80	N/A
6	KMTC201610S-1R5M	1.5 $\pm$ 20%	0.120	0.100	2.80	3.30	2.20	3.20	N/A
7	KMTC201610S-2R2M	2.2 $\pm$ 20%	0.145	0.130	2.00	2.50	1.80	2.30	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)

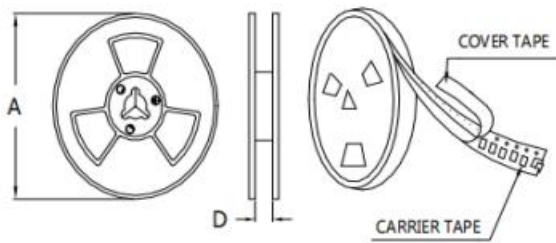


Size	Item	W	A0	B0	K0	P	T	E	F	D0	P0
201610	(mm)	8.00±0.3	1.9±0.15	2.3±0.15	1.15±0.1	4.0±0.1	0.22±0.1	1.75±0.1	3.5±0.1	1.5±0.1	4.0±0.1

### 2.Reel

13" 盘

7" 盘



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

Part No.	Tape	MPQ
201610	Embossed Tape	3000PCS

## Soldering Condition Sproduct

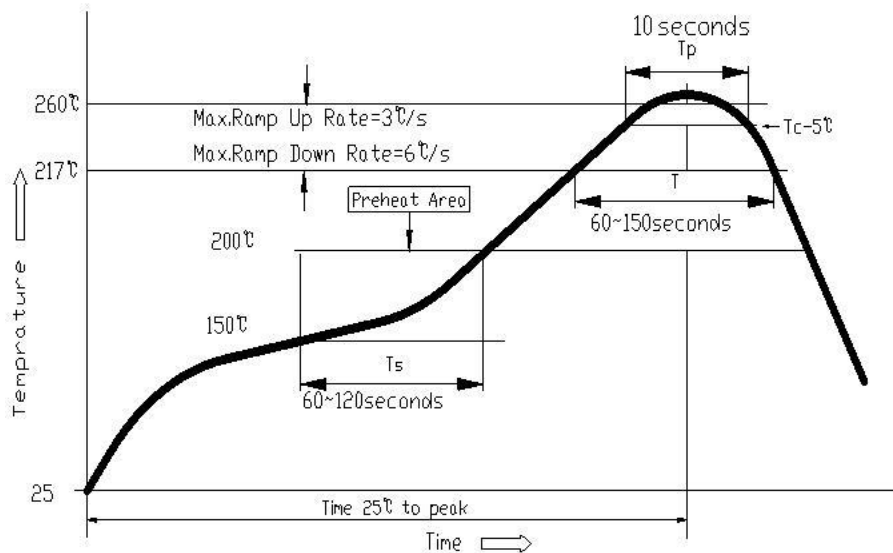
Applicable soldering process to the products is refl.

### 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.

