APPROVAL SPECIFICATION

PRODUCT NAME:

KOOMAG PN:KMKC201610 Series

CUSTOMER PN:

CUSTOMER RESPONSE

☐ Approval ☐ Approval with the following changes ☐ Reject

APPROVED BY	SIGNATURE	DATE

KOOMAG ENGINEERING SIGNATURE

APPROVED BY	CHECKED BY	ISSUED BY
DATE	DATE	DATE

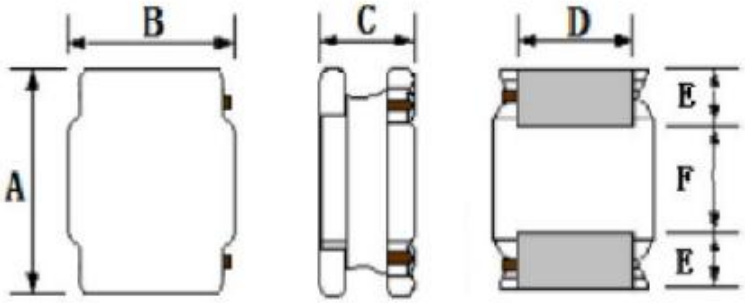
深圳坤磁科技有限公司
SHENZHEN KOOMAG TECHNOLOGY CO., LTD

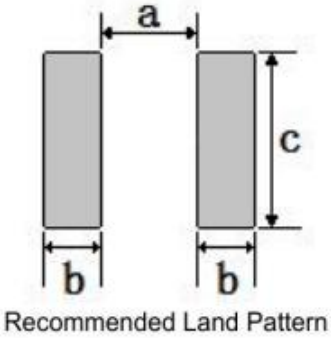
Address: B503, Building B, HuaChuangDa Headquarters Building, Bao'an 49 District, Shenzhen

General Description

This specification applies to the KMKC201610 Series of wire wound SMD power inductor.

Appearance & Shape





Recommended Land Pattern

Dimension (Unit:mm)

NO	Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
1	KMKC201610	2.0±0.3	1.6±0.3	1.05 Max	1.2±0.2	0.6±0.2	0.8±0.2	0.70	0.70	1.70

Part Number

KMKC	201610	-	1R5	
A	B		C	D

A:Series name（产品品名）

B:Dimensions（产品尺寸）

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

D:Tolerance（误差值）M: ±20%; N: ±30%

Electrical Characteristics

Please refer to Item 5.

1). Operating temperature range (individual chip without packing): -40℃ ~ +125℃ .

2). Storage temperature range (packaging conditions): -40℃ ~ +85℃ and RH 70% (Max.).

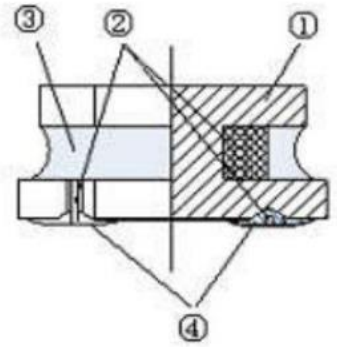
3). Rating DC current: Temperature rise(△T) is 40℃ approximately at Irms.

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	（uH）	Ω	Ω	A	A	A	A	
1	KMKC201610-R22N	0.22±30%	0.040	0.033	3.70	4.10	2.80	3.10	N/A
2	KMKC201610-R24N	0.24±30%	0.040	0.033	3.70	4.10	2.80	3.10	N/A
3	KMKC201610-R33N	0.33±30%	0.048	0.043	3.00	3.70	2.40	2.90	N/A
4	KMKC201610-R47N	0.47±30%	0.060	0.052	2.30	2.85	2.30	2.60	N/A
5	KMKC201610-R68N	0.68±30%	0.076	0.068	1.95	2.45	2.00	2.20	N/A
6	KMKC201610-1R0N	1.0±30%	0.114	0.104	1.65	1.85	1.45	1.60	N/A
7	KMKC201610-1R5M	1.5±30%	0.174	0.164	1.35	1.65	1.10	1.20	N/A
8	KMKC201610-2R2M	2.2±20%	0.265	0.232	1.20	1.45	1.05	1.15	N/A
9	KMKC201610-3R3M	3.3±20%	0.345	0.328	1.00	1.20	0.85	0.95	N/A
10	KMKC201610-4R7M	4.7±20%	0.480	0.430	0.75	0.90	0.70	0.80	N/A
11	KMKC201610-6R8M	6.8±20%	0.800	0.715	0.70	0.85	0.55	0.60	N/A
12	KMKC201610-8R2M	8.2±20%	0.940	0.818	0.68	0.78	0.53	0.60	N/A
13	KMKC201610-100M	10±20%	1.000	0.930	0.65	0.70	0.50	0.60	N/A
14									
15									
16									
17									
18									
19									
20									

※Design as Customer's Requested Specifications. (可按顾客的特殊需求设计）

Structure (The structure of product.)

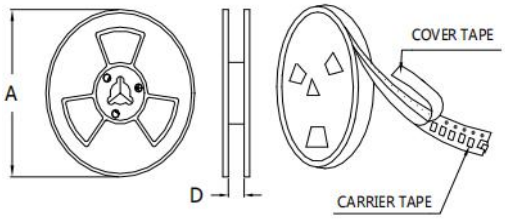


NO	Components	Material
1	Core	Ni-Zn Ferrite
2	Wire	Polyurethane system enameled copper wire
3	Magnetic Glue	Epoxy resin and magnetic powder
4	Plating	AgNiSn or FeNiCu + Sn Alloy

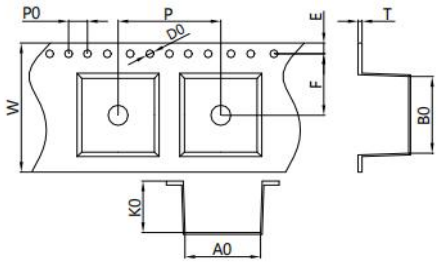
Packaging(unit:mm）

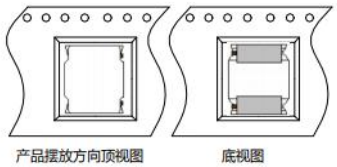
1.Tape Dimensions(Unit:mm)

2.Reel ☐ 13″ 盘 ☑ 7″ 盘



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





Size	Item	W	A0	B0	K0	P	T	E	F	D0	P0
201610	(mm)	8.00±0.3	2.0±0.15	2.4±0.15	1.2±0.1	4.0±0.1	0.25±0.1	1.75±0.1	3.5±0.1	1.5±0.1	4.0±0.1

Part No.	Tape	MPQ
201610	Embossed Tape	2000PCS

Soldering Condition Sproduct

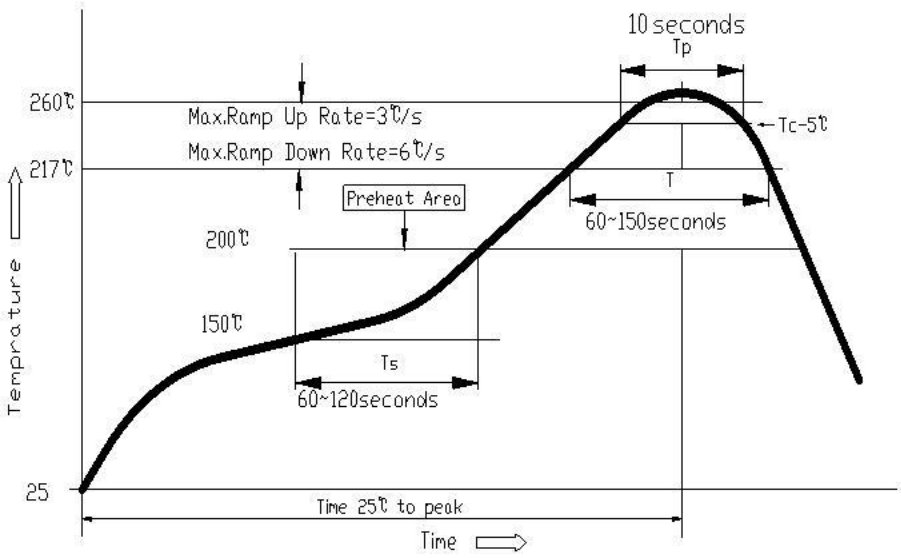
Applicable soldering process to the products is refl.

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 gIron

Reworking with electric solding iron must preheating at 150℃ 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℃；

② Soldering iron power output:≤30W；

③ Diameter of soldering iron end:≤1.0mm；

④Soldering time:＜3s.