

APPROVAL SPECIFICATION

PRODUCT NAME:

KOOMAG PN:KMTC0520 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

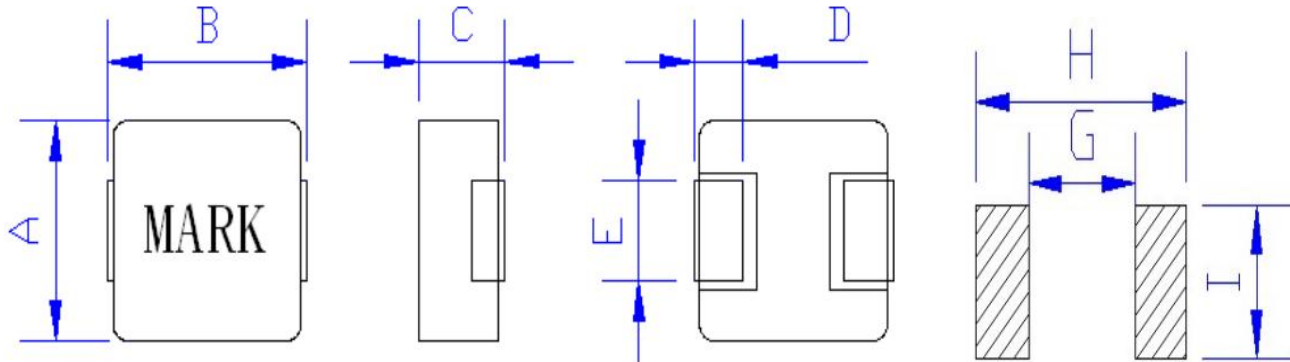
SHENZHEN KOOMAG TECHNOLOGY CO., LTD

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

General Description

This specification applies to the KMTC0520 Series of wire wound SMD power inductor.

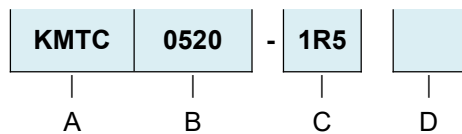
Appearance & Shape



Dimension (Unit:mm)

NO	Series	A	B	C	D	E	G	H	I
1	KMTC0520	5.2 ±0.3	5.6±0.5	2.0 Max	1.3±0.5	2.2±0.3	1.9 Ref.	6.2 Ref.	2.5 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.

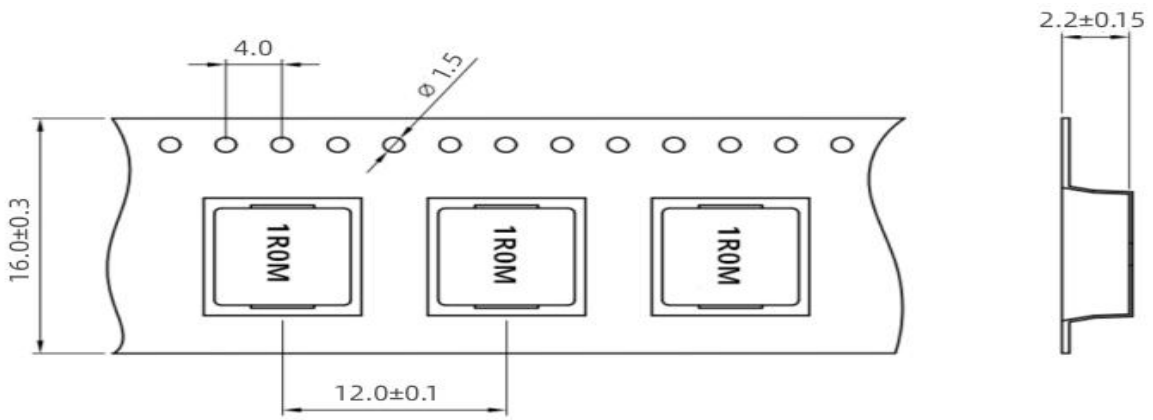
- 1). Operating temperature range (individual chip without packing): $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$.
- 2). Storage temperature range (packaging conditions): $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ and RH 70% (Max.).
- 3). Rating DC current: Temperature rise(ΔT) is 40°C approximately 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	(μH)	m Ω	m Ω	A	A	
1	KMTC0520-R22M	0.22 \pm 20%	6.5	4.4	15.0	11.0	R22
2	KMTC0520-R33M	0.33 \pm 20%	10	7.2	13.0	10.0	R33
3	KMTC0520-R47M	0.47 \pm 20%	15	10	12.0	7.0	R47
4	KMTC0520-R68M	0.68 \pm 20%	21	14	11.0	6.0	R68
5	KMTC0520-1R0M	1.00 \pm 20%	25	17	10.0	5.0	1R0
6	KMTC0520-1R5M	1.50 \pm 20%	40	26	8.0	4.5	1R5
7	KMTC0520-2R2M	2.20 \pm 20%	46	38	7.0	4.0	2R2
8	KMTC0520-3R3M	3.30 \pm 20%	90	61	5.5	3.5	3R3
9	KMTC0520-4R7M	4.70 \pm 20%	100	84	5.0	2.8	4R7
10	KMTC0520-5R6M	5.60 \pm 20%	115	93	4.5	2.5	5R6
11	KMTC0520-6R8M	6.80 \pm 20%	160	124	4.0	2.2	6R8
12	KMTC0520-100M	10.00 \pm 20%	225	190	3.0	1.8	100
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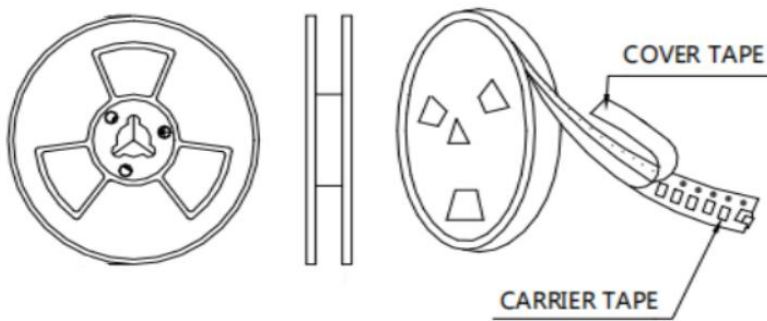
※Design as Customer's Requested Specifications. (可按顾客的特殊需求设计)

■ Packaging(unit:mm)

1.Tape Dimensions(Unit:mm)



2.Reel



Part No.	Tape	MPQ
KMTC0520	Embossed Tape	3000PCS

Soldering Condition Sproduct

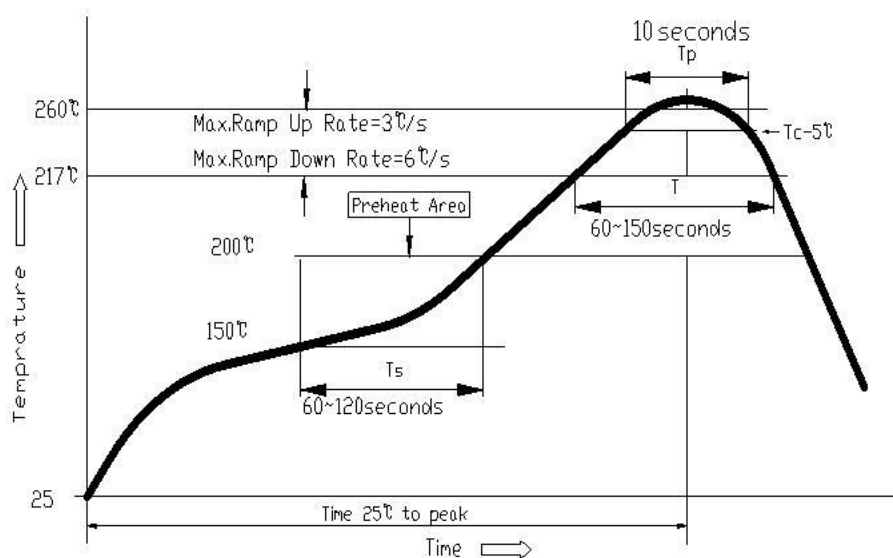
Applicable soldering process to the products is refl.

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.

- 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.

