

APPROVAL SPECIFICATION

PRODUCT NAME:

KOOMAG PN:KMTC0420 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

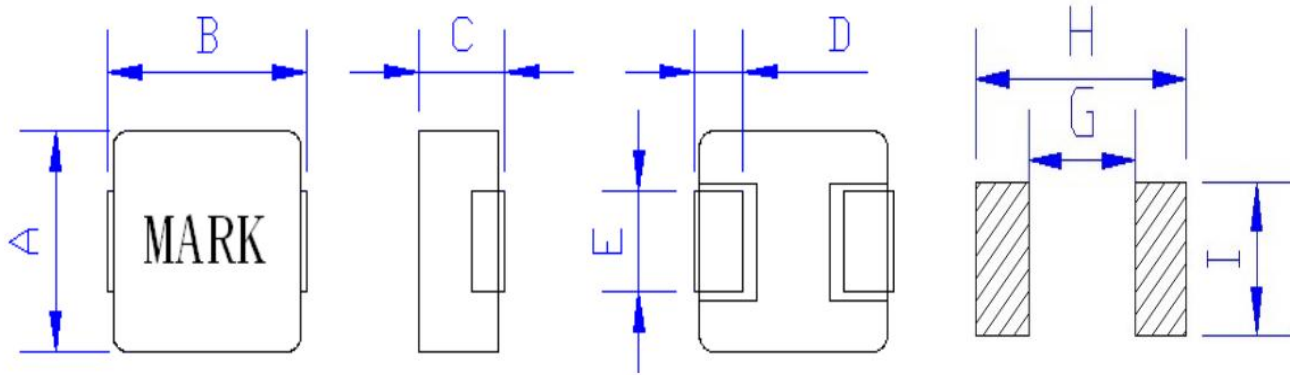
深圳坤磁科技有限公司
 SHENZHEN KOOMAG TECHNOLOGY CO., LTD

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General Description

This specification applies to the KMTC0420 Series of wire wound SMD power inductor.

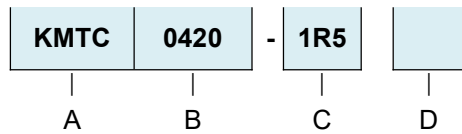
Appearance & Shape



Dimension (Unit:mm)

NO	Series	A	B	C	D	E	G	H	I
1	KMTC0420	4.05 ±0.3	4.45±0.5	2.0 Max	1.1±0.5	2.0±0.3	1.7 Ref.	5.1 Ref.	2.3 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.

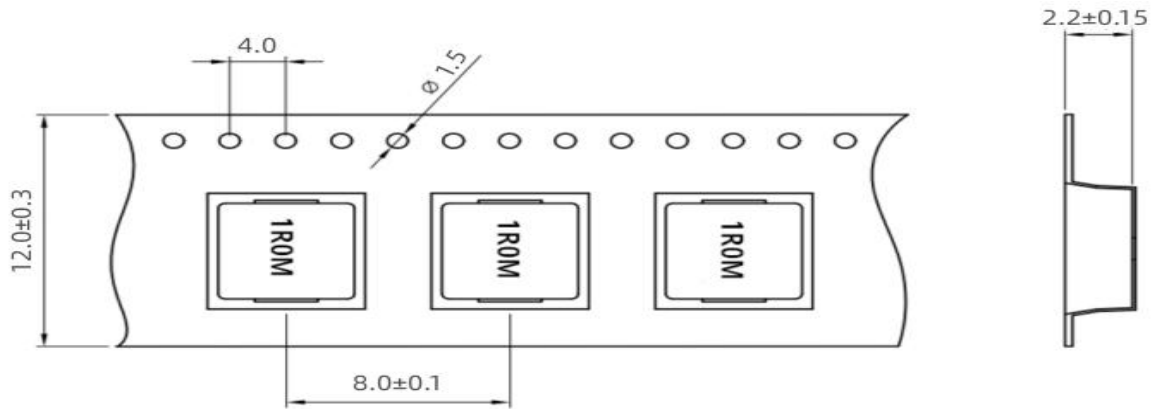
- 1). Operating temperature range (individual chip without packing): $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$.
- 2). Storage temperature range (packaging conditions): $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ and RH 70% (Max.).
- 3). Rating DC current: Temperature rise(ΔT) is 40°C approximately 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	KMTC0420-R10M	0.10 \pm 20%	5.8	4.4	22.0	10.0	R10
2	KMTC0420-R22M	0.22 \pm 20%	7.0	5.3	14.0	8.0	R22
3	KMTC0420-R27M	0.27 \pm 20%	11.5	8.5	12.0	7.0	R27
4	KMTC0420-R33M	0.33 \pm 20%	11.5	8.5	12.0	7.0	R33
5	KMTC0420-R47M	0.47 \pm 20%	14.5	11	11.0	6.0	R47
6	KMTC0420-R56M	0.56 \pm 20%	22	16.5	10.0	5.5	R56
7	KMTC0420-R68M	0.68 \pm 20%	23	17.5	9.0	5.0	R68
8	KMTC0420-1R0M	1.00 \pm 20%	34	26	8.0	4.0	1R0
9	KMTC0420-1R5M	1.50 \pm 20%	45	35	7.0	3.5	1R5
10	KMTC0420-2R2M	2.20 \pm 20%	55	45	6.0	3.0	2R2
11	KMTC0420-3R3M	3.30 \pm 20%	90	77	4.0	2.5	3R3
12	KMTC0420-4R7M	4.70 \pm 20%	130	100	3.5	2.0	4R7
13	KMTC0420-6R8M	6.80 \pm 20%	170	142	3.0	2.5	6R8
14	KMTC0420-100M	10.00 \pm 20%	252	220	2.5	1.5	100
15							
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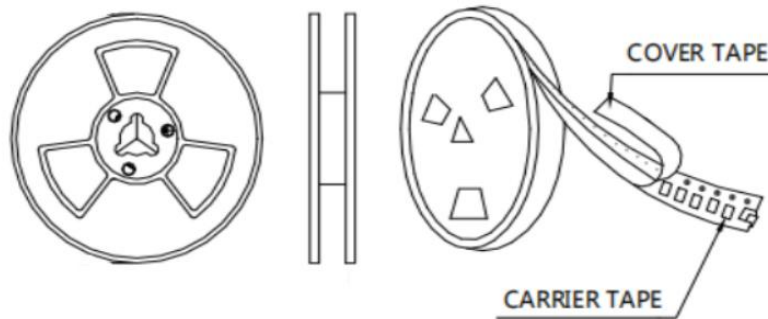
※Design as Customer's Requested Specifications. (可按顾客的特殊需求设计)

■ Packaging(unit:mm)

1.Tape Dimensions(Unit:mm)



2.Reel



Part No.	Tape	MPQ
KMTC0420	Embossed Tape	3000PCS

Soldering Condition Sproduct

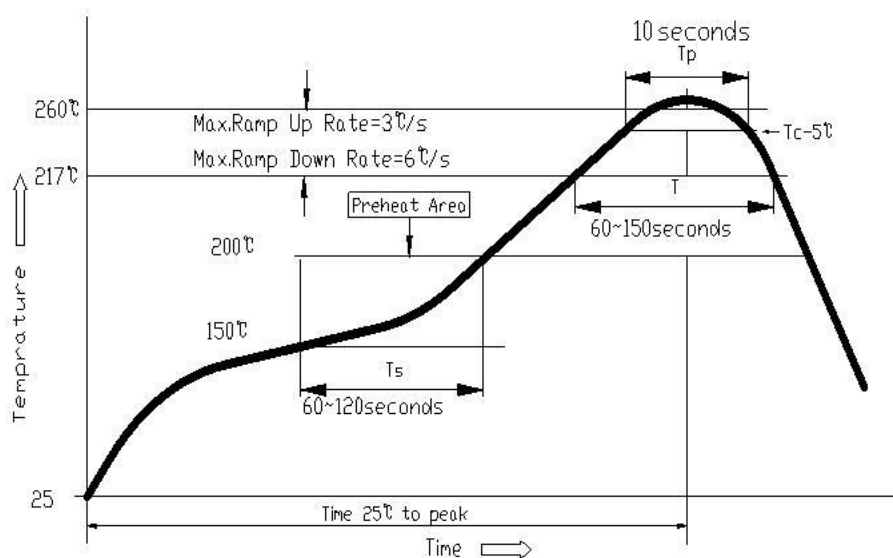
Applicable soldering process to the products is refl.

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 solding 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.

