

APPROVAL SPECIFICATION

PRODUCT NAME:

KOOMAG PN:KMTC1040 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

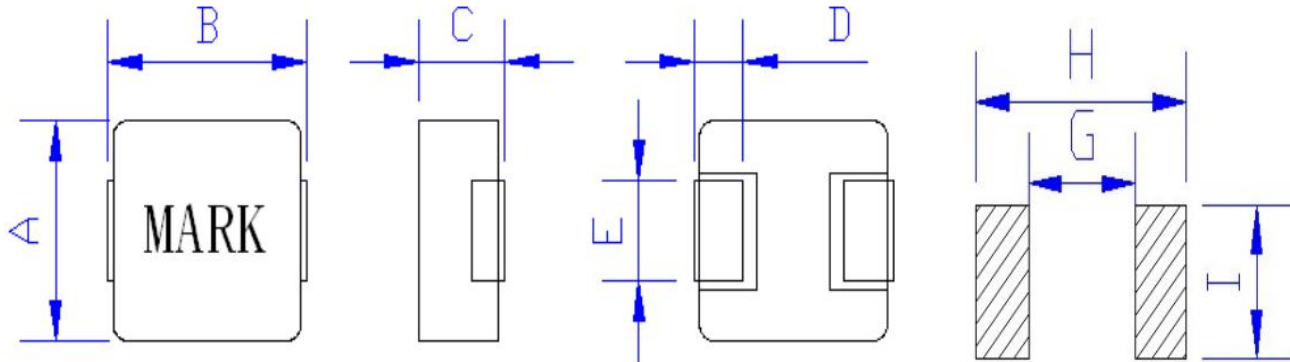
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 SHENZHEN KOOMAG TECHNOLOGY CO., LTD

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General Description

This specification applies to the KMTC1040 Series of wire wound SMD power inductor.

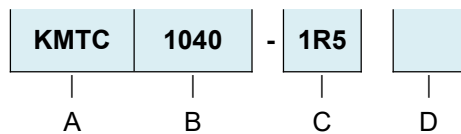
Appearance & Shape



Dimension (Unit:mm)

NO	Series	A	B	C	D	E	G	H	I
1	KMTC1040	10.2 ±0.3	11±0.5	4.0 Max	2.0±0.5	3.0±0.3	6.0 Ref.	11.8 Ref.	3.5 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.

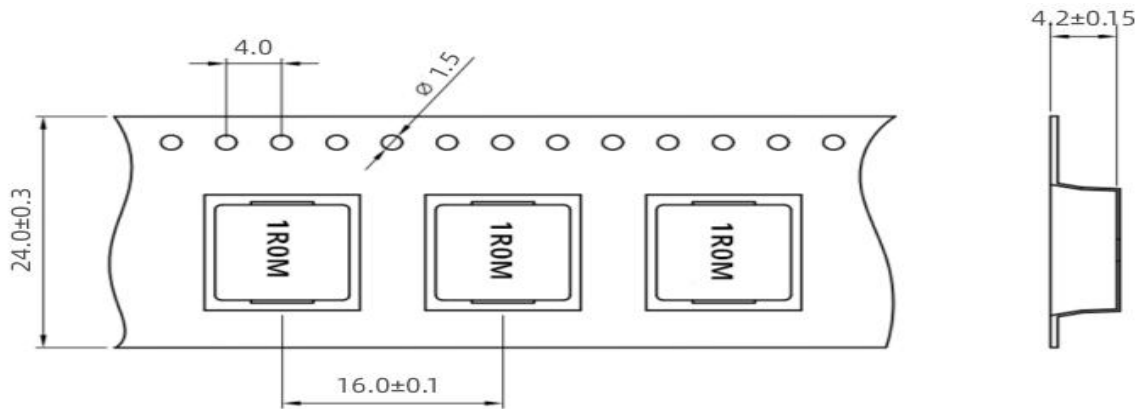
- 1). Operating temperature range (individual chip without packing): $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$.
- 2). Storage temperature range (packaging conditions): $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ and RH 70% (Max.).
- 3). Rating DC current: Temperature rise(ΔT) is 40°C approximately 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	KMTC1040-R22M	0.22 \pm 20%	0.8	0.55	50.0	25.0	R22
2	KMTC1040-R33M	0.33 \pm 20%	1.5	1.0	38.0	22.0	R33
3	KMTC1040-R47M	0.47 \pm 20%	1.8	1.15	35.0	20.0	R47
4	KMTC1040-R56M	0.56 \pm 20%	2.2	1.7	34.0	17.0	R56
5	KMTC1040-R68M	0.68 \pm 20%	2.8	1.95	32.0	16.0	R68
6	KMTC1040-1R0M	1.00 \pm 20%	3.5	2.4	28.0	15.0	1R0
7	KMTC1040-1R5M	1.50 \pm 20%	6.0	4.8	20.0	12.0	1R5
8	KMTC1040-2R2M	2.20 \pm 20%	9.0	6.5	18.0	11.0	2R2
9	KMTC1040-3R3M	3.30 \pm 20%	12	9.0	17.0	10.0	3R3
10	KMTC1040-4R7M	4.70 \pm 20%	20	14	13.0	8.0	4R7
11	KMTC1040-6R8M	6.80 \pm 20%	25	18	11.0	6.0	6R8
12	KMTC1040-100M	10.00 \pm 20%	45	31	9.0	5.0	100
13	KMTC1040-150M	15.00 \pm 20%	75	50	8.0	4.0	150
14	KMTC1040-220M	22.00 \pm 20%	90	63.5	7.0	3.5	220
15	KMTC1040-330M	33.00 \pm 20%	120	89	6.0	3.0	330
16	KMTC1040-470M	47.00 \pm 20%	170	130	5.0	2.5	470
17	KMTC1040-680M	68.00 \pm 20%	250	203	4.0	2.0	680
18							
19							
20							

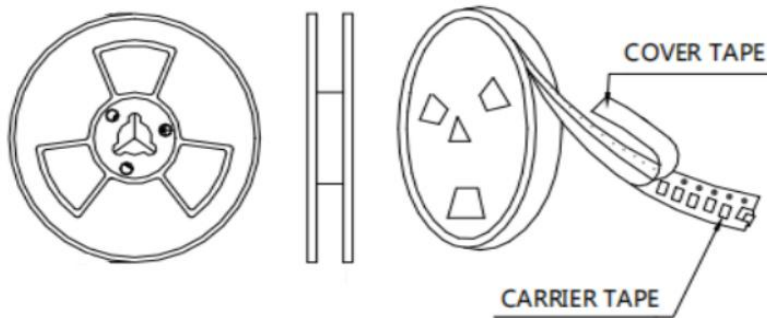
※Design as Customer's Requested Specifications. (可按顾客的特殊需求设计)

■ Packaging(unit:mm)

1.Tape Dimensions(Unit:mm)



2.Reel



Part No.	Tape	MPQ
KMTC1040	Embossed Tape	1000PCS

Soldering Condition Sproduct

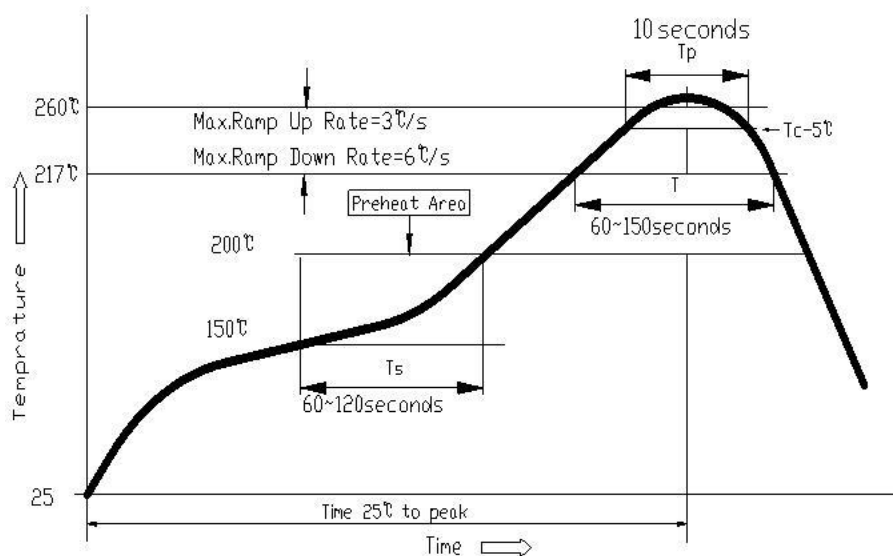
Applicable soldering process to the products is refl.

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.

