


Product Specification for Approval

WE ARE PLEASED IN SUBMITTING OUR SAMPLES WITH SPECIFICATION TO YOU FOR APPROVAL.

CUSTOMER	:	
DESCRIPTION	:	POWER INDUCTOR
MNC P/N	:	MHA0420NSGR47M
VERSION	:	A0
CUSTOMER P/N	:	
ISSUED DATE	:	2020/4/25
PHOTO OF PRODUCT	:	
WEIGHT	:	0.20g
MADE IN	:	CHINA

APPROVED BY MNC		
PREPARED BY	CHECKED BY	APPROVED BY
Fanny	Rongyin Chen	Bill Ya

APPROVED BY CUSTOMER
SIGNATURE OR STAMP

1. PLEASE SEND BACK US A COPY OF THE SPECIFICATION WITH YOUR STAMP OR SIGNATURE ONCE THE SAMPLES APPROVED.
2. IT WILL BE DEEMED THE SAMPLES TO BE APPROVED IF NO FEEDBACK.

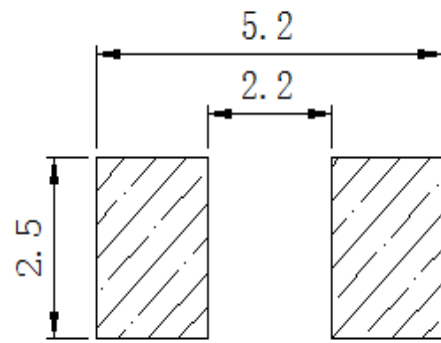
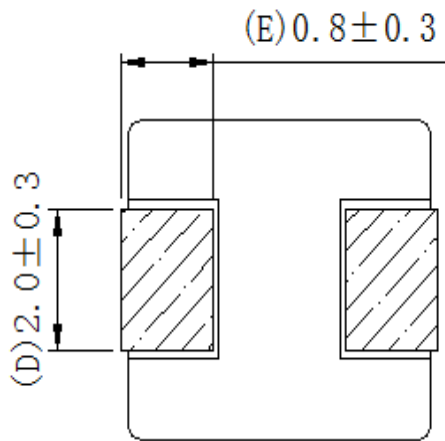
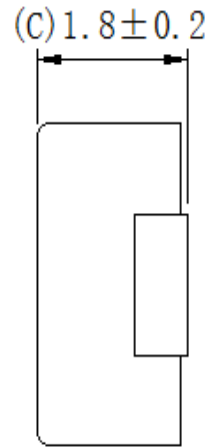
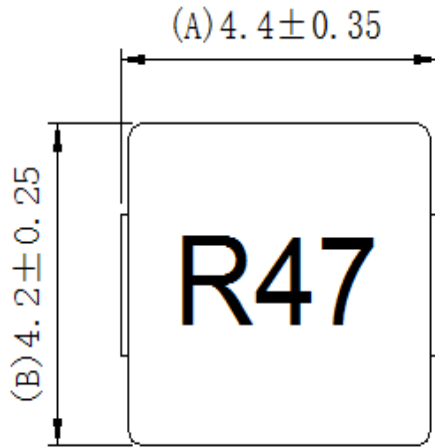
东莞铭普光磁股份有限公司

Add: Shipai Town, Dongguan City, Guangdong Province, China

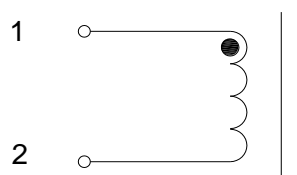
TEL: +86-769-86921000

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A.MECHANICAL DIMENSIONS(Unit:mm):



Suggested Pad Layout

SPECIFICATION
Part No. MHA0420NSGR47M
B. SCHEMATIC :


● START WINDING

C. ELECTRICAL SPECIFICATION @25°C

ITEM	SPECIFICATION	TEST CONDITION	TEST EQUIPMENT
INDUCTANCE : 1-2	0.47uH ±20%	100KHz, 0.25V	TH3260B OR EQU.
DC RESISTANCE : 1-2	14.0mΩ Max	25°C	TOS8020 OR EQU.
Isat :	9.5A	100KHz, 0.25V,	WK3260B+WK3265B
Irms :	7.0A	25°C	WK3260B+WK3265B
OPERATING TEMPERATURE RANGE : (INCLUDING COIL' SELF TEMPERATURE RISE)		-55°C to 125°C	
STORAGE TEMPERATURE RANGE :		-55°C to 125°C	

REMARK:

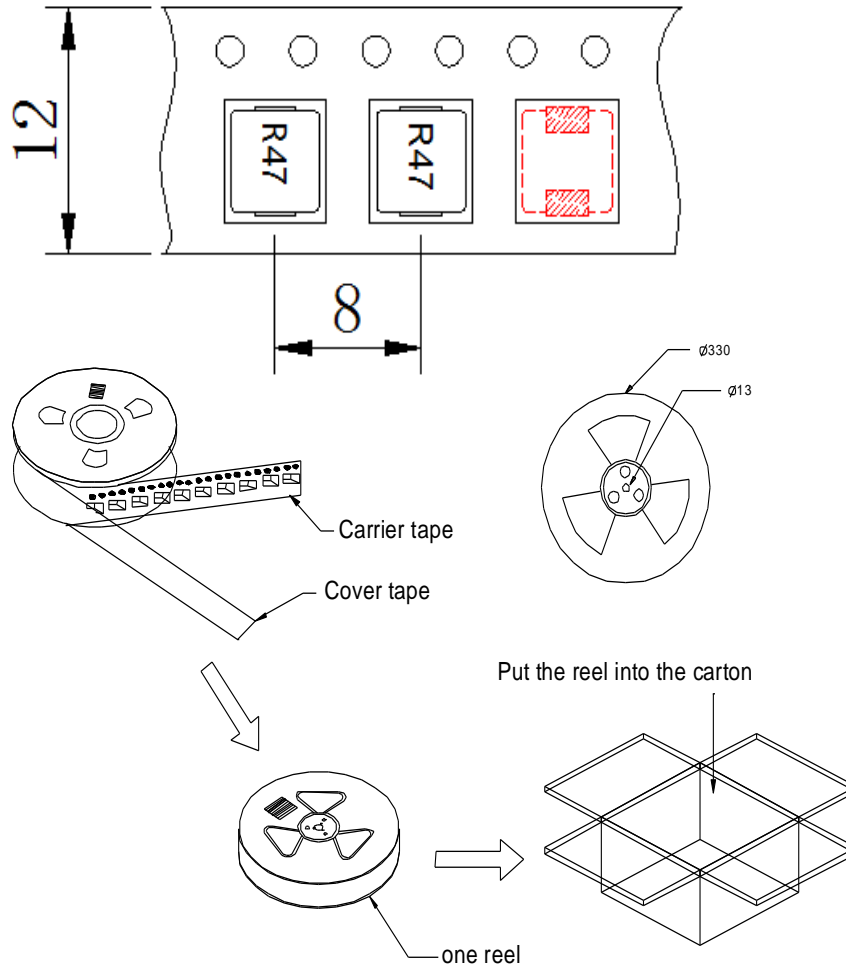
- 1.The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- 2.Saturation Current (Isat) is the current which causes the inductance to drop approximately 30% from the nominal inductance at 0ADC at the stated ambient temperature(25°C).
- 3.Heating Current (Irms) is the DC current which causes the part temperature to increase by approximately 40°C . This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes.

PACKAGE

Part No. MHA0420NSGR47M

1. PACKING:

a. PACKAGING AS BELOW (ONLY FOR REFERENCE):



b. Q'TY:

3000PCS/REEL
 12REELS/CASE
 36000PCS/CASE

c. LABEL:



REMARK:

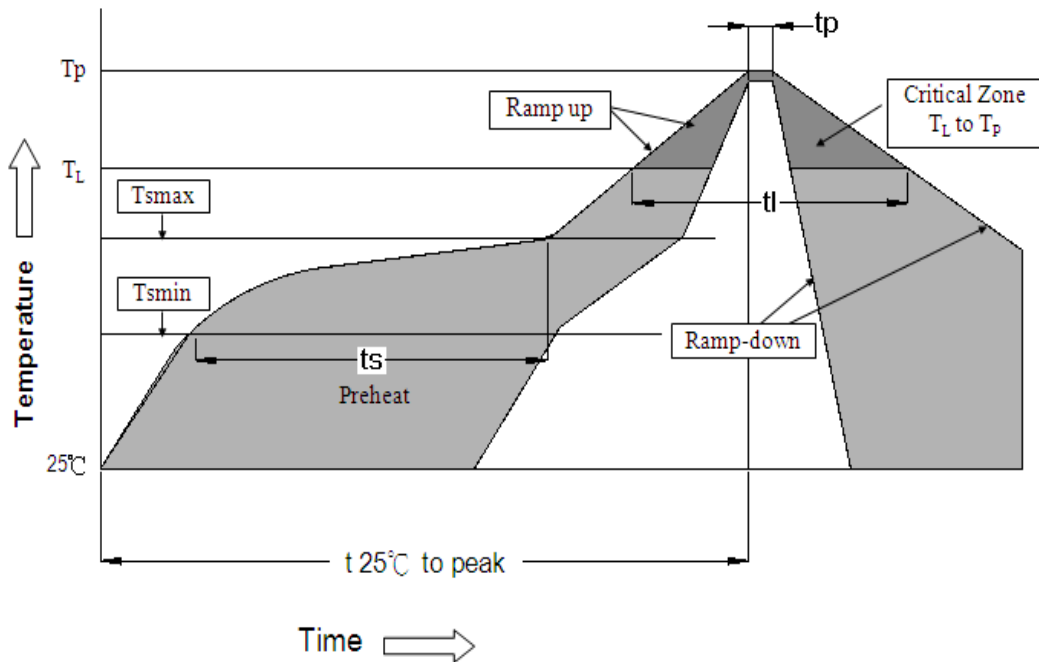
ABOVE PACKING IS FOR YOUR REFERENCE ONLY, WHICH MIGHT BE CHANGED WITHOUT NOTICE.

MATERIAL LIST
Part No. MHA0420NSGR47M
BOM

MATERIAL LIST					
NO.	ITEM	MATERIAL	RATING	SUPPLIER OF MATERIAL	UL
1	IRON BODY	Alloy Magnetic Powder	-----	ANTAI	N/A
2	WIRE	AIW	220℃	PACIFIC	E201757
	WIRE	AIW	220℃	ELEKTRISOLA	E258243
3	TERMINAL- CLIP	C1100	-----	MINGSCHIN	N/A
4	BLACK INK	LTS19	-----	JIZHOU	N/A

1. RECOMMENDED REFLOW SOLDERING PROFILE:

Below content is only for your reference.



$T = 217^{\circ}\text{C}$

$T_p = 250^{\circ}\text{C}$

$t_s = 60-180\text{s}$ $T_s \text{ max} = 200^{\circ}\text{C}$ $T_s \text{ min} = 150^{\circ}\text{C}$

$t_L = 60-150\text{s}$ $t_p = 20-40\text{s}$ $T_{25^{\circ}\text{C to peak}} = 8\text{min max}$

Ramp up rate = 3°C/s max

Ramp down rate = 6°C/s max

*RoHS Compliant

*Solder Paste SAC 305 Sn 96.5/Ag 3.0/Cu 0.5

*Silkscreen thickness: 0.15mm Min

2. MOISTURE SENSITIVE LEVEL:

2.1. Level: 1

2.2. Shelf Life: Unlimited

2.3. Storage Condition: $\cong 30^{\circ}\text{C}/85\% \text{ RH}$