

# MHA0730NSGR47M Datasheet

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DiGi Electronics Part Number MHA0730NSGR47M-DG

Manufacturer Mentech Technology USA Inc.

Manufacturer Product Number MHA0730NSGR47M

Description FIXED IND 470NH 18A 4.1MOHM SMD

Detailed Description 470 nH Molded Inductor 18 A 4.1mOhm Max Nonst

andard



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RFQ Email: Info@DiGi-Electronics.com

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## **Purchase and inquiry**

Manufacturer Product Number:	Manufacturer:
MHA0730NSGR47M	Mentech Technology USA Inc.
Series:	Product Status:
	Active
Type:	Material - Core:
Molded	
Inductance:	Tolerance:
470 nH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
18 A	20A
DC Resistance (DCR):	Q @ Freq:
4.1mOhm Max	
Frequency - Self Resonant:	Ratings:
Operating Temperature:	Features:
-55°C ~ 125°C	
Mounting Type:	Package / Case:
Surface Mount	Nonstandard
Supplier Device Package:	Size / Dimension:
	0.272" L x 0.256" W (6.90mm x 6.50mm)
Height - Seated (Max):	
0.110" (2.80mm)	

## **Environmental & Export classification**

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
ECCN:	HTSUS:
EAR99	8504.50.0000



## **Product Specification for Approval**

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

CUSTOMER	:		
DESCRIPTION	:	POWER INDUCTOR	
MNC P/N	:	MHA0730NSGR47M	
VERSION	:	<b>A0</b>	R.
CUSTOMER P/N	:		3000
ISSUED DATE	:	2020/4/25	
PHOTO OF PRODUCT	:		
WEIGHT	:	0.76g	
MADE IN	:	CHINA	

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

- 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.

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#### HISTORY FOR REVISED SPECIFICATION

Part No. MHA0730NSGR47M

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#### **CHANGE RECORD**

REV.	DESCRIPTION (Content or Reason For Change)	DATE	REVISOR
A0	INITIAL RELEASE	2020/4/25	Fanny

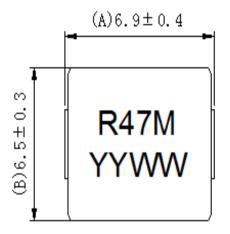
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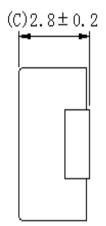


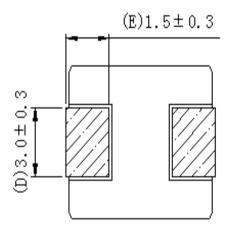
#### **SPECIFICATION**

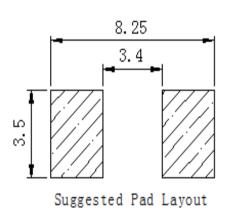
#### Part No. MHA0730NSGR47M

#### **A.MECHANICAL DIMENSIONS(Unit:mm):**











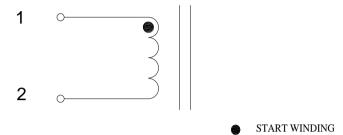
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#### **SPECIFICATION**

Part No. MHA0730NSGR47M

#### **B. SCHEMATIC:**



#### 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	4.10mΩ Max	25℃	TOS8020 OR EQU.
Isat :	20.0A	100KHz, 0.25V,	WK3260B+WK3265B
Irms:	18.0A	25℃	WK3260B+WK3265B
OPERATING TEMPERATURE RANGE : (INCLUDING COIL' SELF TEMPERATURE RISE)		-55°C to 125°C	
STORAGE TEMPERATURE RANGE :		-55℃ to 125℃	

#### **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 ( $25^{\circ}$ C).
- 3.Heating Current (Irms) is the DC current which causes the part temperature to increase by approximately  $40\,^{\circ}\text{C}$ . This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes.

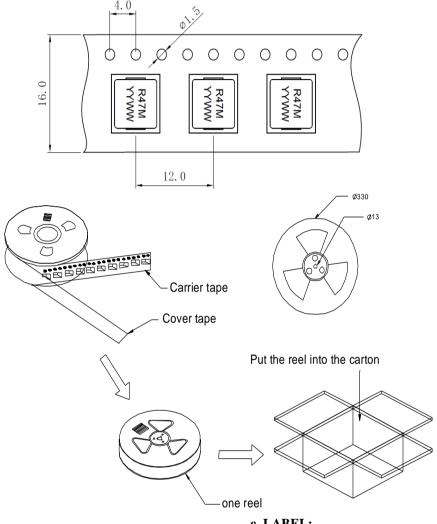


#### **PACKAGE**

Part No. MHA0730NSGR47M

#### 1. PACKING:

#### a. PACKAGING AS BELOW (ONLY FOR REFERENCE):



b. Q'TY: c. LABEL:

1500PCS/REEL

10REELS/CASE

15000PCS/CASE



#### **REMARK:**

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



#### MATERIAL LIST

Part No. MHA0730NSGR47M

#### **BOM**

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

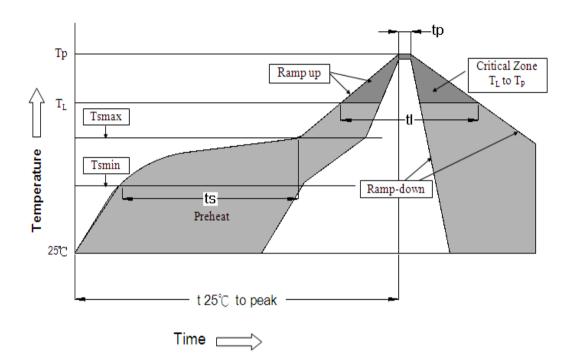


#### RECOMMENDED SOLDERING PROFILE

Part No. MHA0730NSGR47M

#### 1. RECOMMENDED REFLOW SOLDERING PROFILE:

Below content is only for your reference.



 $T = 217^{\circ}C$ 

 $Tp = 250^{\circ}C$ 

ts=60-180s Ts max=200 $^{\circ}$ C Ts min=150 $^{\circ}$ C

 $t_1=60-150s$  tp=20-40s  $T25^{\circ}$ C to peak=8min 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: ≤30°C/85% RH



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DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

















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