Engineering/Process Change Notice

ECN/PCN No.: 4636

For Manufacturer		
Product Description: Ceramic Resonator	**Abracon Part Number / Part Series:** AWSCR-MT Series	☐ Documentation only ☐ Series ☒ ECN ☒ Part Number ☐ EOL
Affected Revision: D	**New Revision:** EOL	**Application:** ☐ Safety ☒ Non-Safety
Prior to Change: Active AWSCR-MT Rev D		
After Change: EOL		
Cause/Reason for Change: Discontinuation of manufacturing capability.		

Change Plan		
Effective Date: 4/10/2023	**Additional Remarks:**	
Change Declaration:		
Issued Date: 4/10/2023	**Issued By:** *Stephanie Lopez*	**Issued Department:** Engineering
Approval: *Thomas Culhane* Engineering Director	**Approval:** *Reuben Quintanilla* Quality Director	**Approval:** *Ying Huang* Purchasing Director

For Abracon EOL only		
Last Time Buy (if applicable): N/A	**Alternate Part Number / Part Series:** AWSCR-MTD	
Additional Approval:	**Additional Approval:**	**Additional Approval:**

Customer Approval (If Applicable)		
Qualification Status: ☐ Approved ☐ Not accepted *Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.*		
Customer Part Number:	**Customer Project:**	
Company Name:	**Company Representative:**	**Representative Signature:**
Customer Remarks:		

INDUSTRIAL GRADE BUILT-IN CAPACITANCE CERAMIC RESONATOR

AWSCR-MT

Pb in ceramic
(exempt per RoHS 2002/95/EC Annex (7))

RoHS Compliant



4.7 x 4.1 x 1.2 mm

FEATURES:

- Low resonant impedance
- High stability type
- Excellent environmental resistance
- Industrial grade
- Built-in load capacitance
- Reflow capable

APPLICATIONS:

- Remote controls, Microprocessor clocks, Mobile phones, DVD & CD-Roms, Electric appliances, Industrial controllers

ELECTRICAL CHARACTERISTICS:

Item	Requirement
Frequency Range	8.00MHz to 50.00MHz
Resonant Impedance	See Table 2.1
Frequency Tolerance and stability	See Table 2.1
Withstanding Voltage	50 (DC , 1 min)
Rating Voltage	
(1) D.C.Voltage	6 V.D.C. max
(2) A.C. Voltage	15 Vp-p. max
Load Capacitance	See Table 2.2 for standard See Option Code for options
Insulation Resistance	500MΩ min. (10V, 1min)
Operation Temperature	See Table 2.1
Storage Temperature	-55°C to +85°C
Aging Rate (Fosc)	±0.3% max. (10 years)

TABLE 2.2

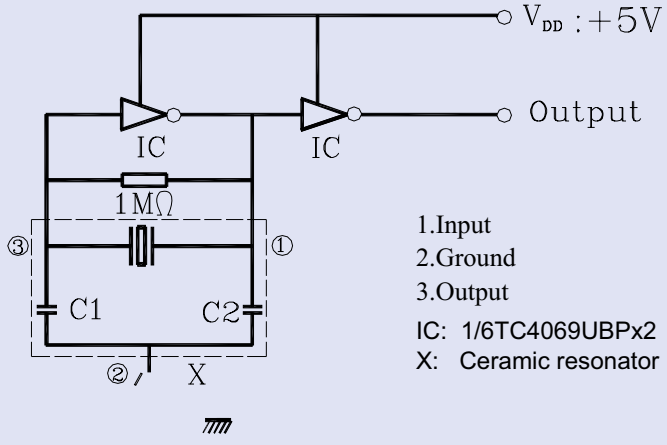
Freq (MHz)	CI=C2 pf (±20%)
8.00~13.00	22
13.01~16.00	22
16.01~40.00	15
40.01~50.00	5

TABLE 2.1

Part Number (XX.XX denotes frequency in MHz)	Frequency Tolerance at 25°C	Frequency Stability at Operating Temp.	Operating Temperature	Resonant Impedance (Ω) max
AWSCR-XX.XXMTS 8.00 MHz - 13.00 MHz 13.01 MHz - 50.00 MHz	±0.5%	± 0.3%	-20° to +80°C	 30 40
AWSCR-XX.XXMTD 8.00 MHz - 13.00 MHz 13.01 MHz - 50.00 MHz	±0.5%	± 0.5%	-40° to +85°C	 30 40
AWSCR-XX.XXMTA 8.00 MHz - 13.00 MHz 13.01 MHz - 50.00 MHz	±0.5%	± 0.7%	-40° to +125°C	 30 40

EOL

TEST CIRCUIT:



1.Input
2.Ground
3.Output
IC: 1/6TC4069UBPx2
X: Ceramic resonator

Parts shall be tested under the condition (Temp.: 20 ±3°C, Humidity: 65±20% R.H.) unless the standard condition; (Temp.: 25±3°C, Humidity: 65±10% R.H.) is regulated to measure.

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

AWSCR - Frequency- MT □ - C□□ - □

Frequency
XX.XXMHz

Operating Temperature	
S	-25° to +85°C
D	-40° to +85°C
A	-40° to +125°C

Packaging
T for Tape and Reel (1,000pcs/reel)

Load Capacitance
ex. 5pF-20pF

Contact ABRACON for Load Capacitance options

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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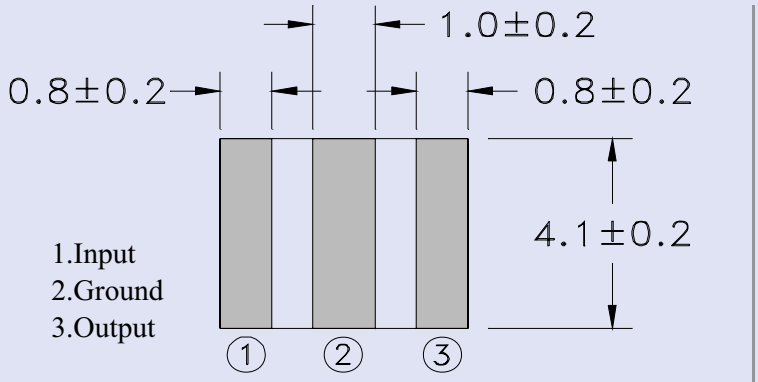
4.7 x 4.1 x 1.2 mm

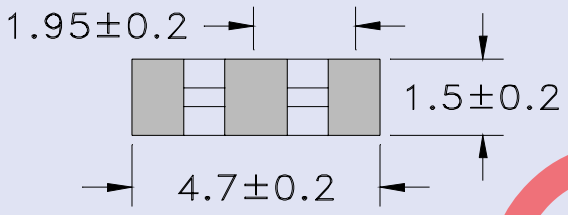
AWSCR-MT

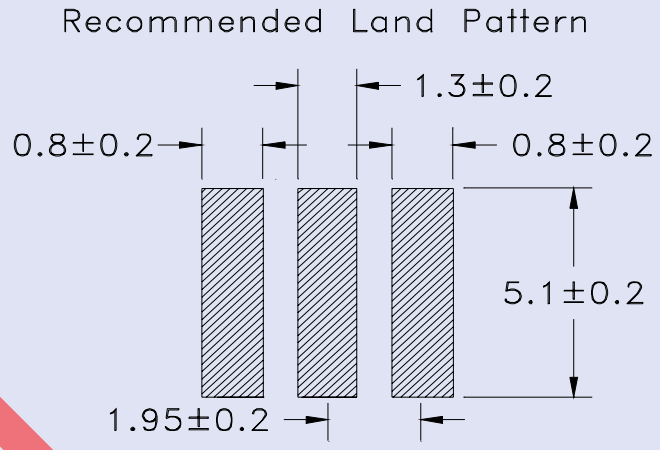
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RoHS Compliant

OUTLINE DRAWING:

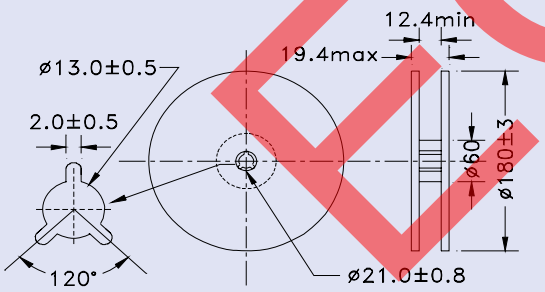


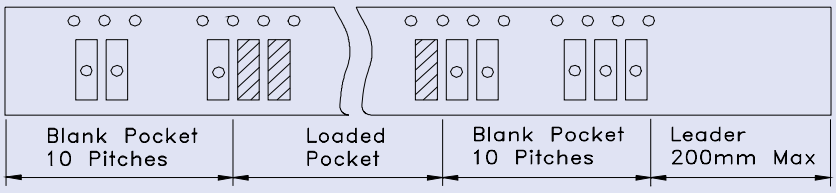


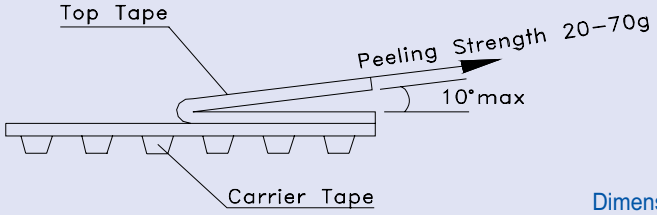


Dimensions: mm

TAPE & REEL: T = Tape and reel 1,000pcs/reel







Dimensions: mm

EOL

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AWSCR



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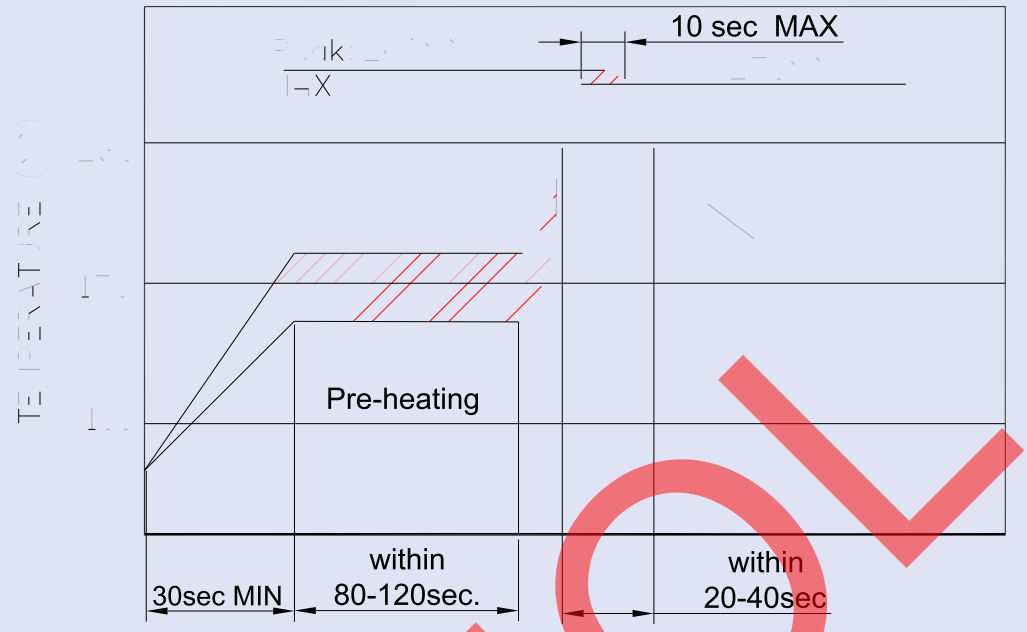
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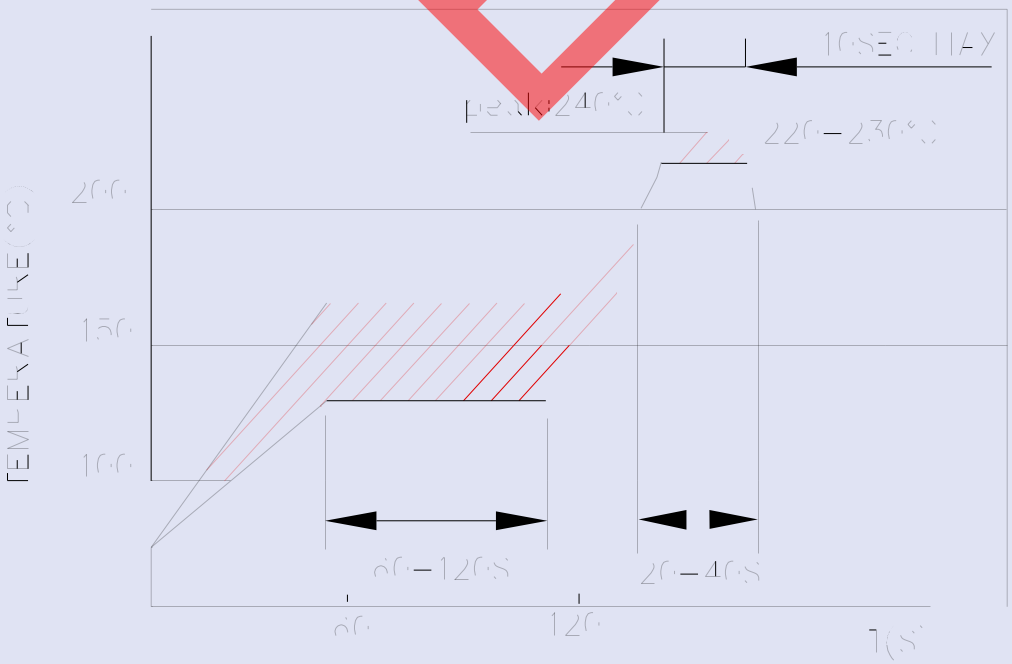
SUGGESTED REFLOW PROFILE:

ROHS reflow profile high temperature
(applies to parts manufactured after 2/1/2007 -lot# later than 07 01 xxx)



EOL

ROHS reflow profile
(applies to parts manufactured before 2/1/2007 -lot# before than 07 01 xxx)



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