

ECN/PCN No.: 4636

For Manufacturer			
Product Description: Ceramic Resonator	Abrakon Part Number / Part Series: AWSCR-MT Series	☐ Documentation only ☒ ECN ☐ EOL	☐ Series ☒ Part Number
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 <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
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

AWSCR



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)

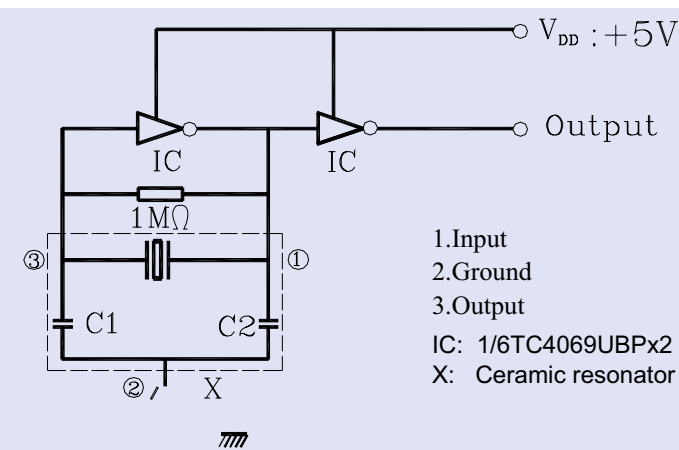
TABLE 2.2

Freq (MHz)	Cl=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

TEST CIRCUIT:



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.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

AWSCR - Frequency- MT - C -

Frequency
XX.XXMHz

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

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

Load Capacitance
ex. 5pF-20pF

Contact ABRACON for Load Capacitance options

Visit www.abracon.com for Terms & Conditions of Sale Revised: 08.20.07

30332 Esperanza, Rancho Santa Margarita, California 92688

tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

INDUSTRIAL GRADE BUILT-IN CAPACITANCE CERAMIC RESONATOR

AWSCR-MT

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

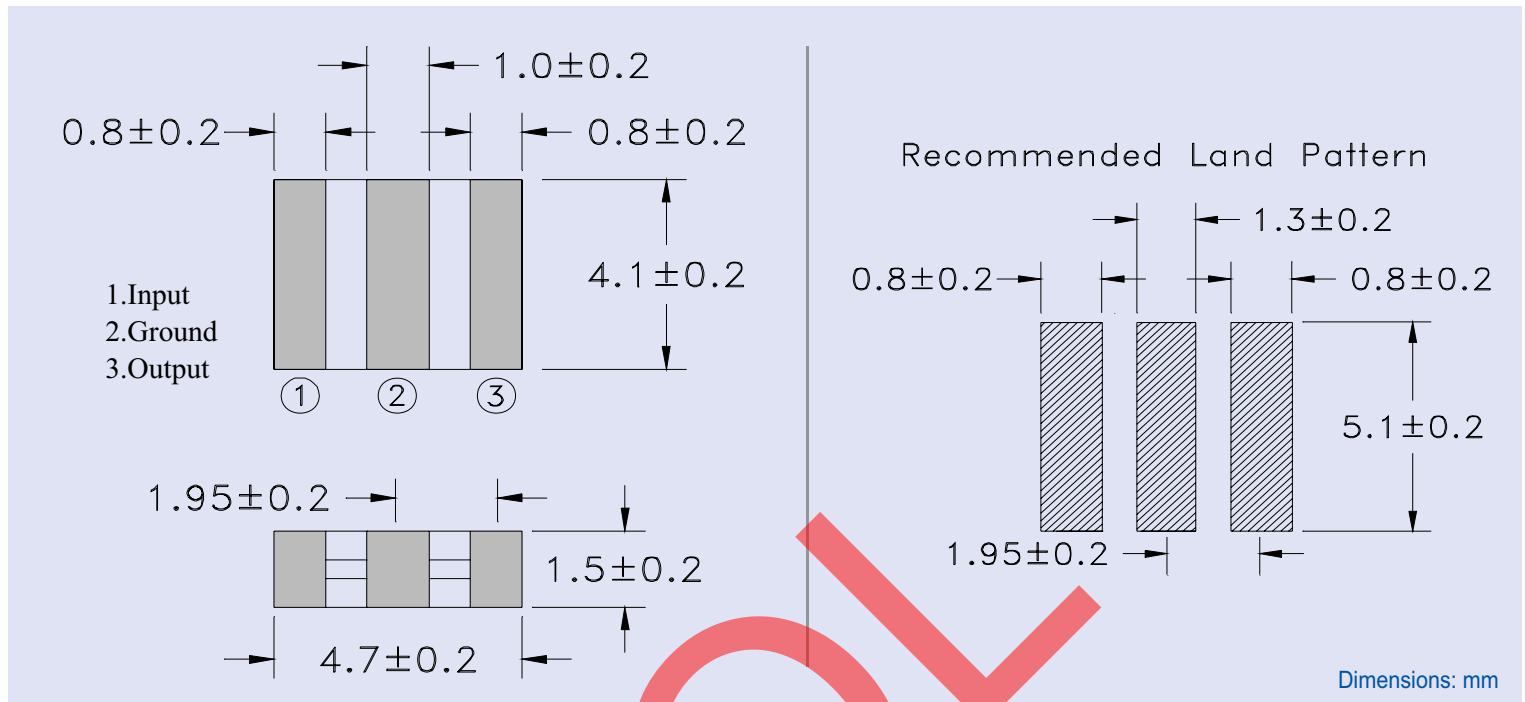
RoHS
Compliant

AWSCR

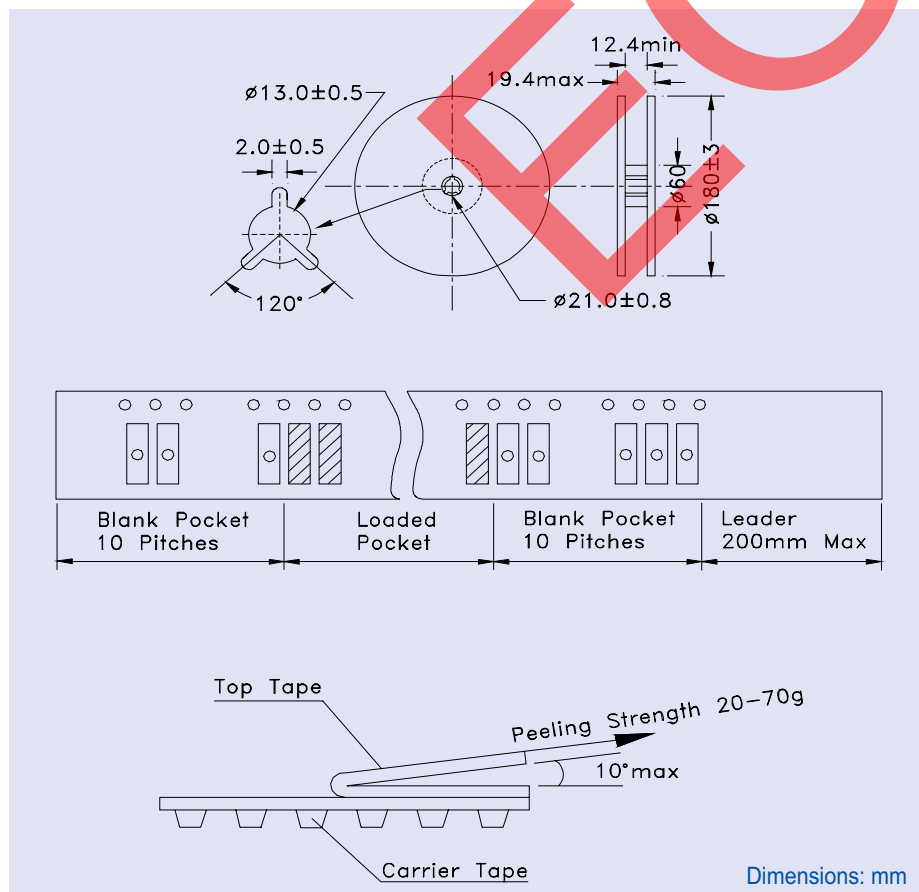


4.7 x 4.1 x 1.2 mm

➤ OUTLINE DRAWING:



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



INDUSTRIAL GRADE BUILT-IN CAPACITANCE CERAMIC RESONATOR

AWSCR-MT

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

RoHS
Compliant

AWSCR

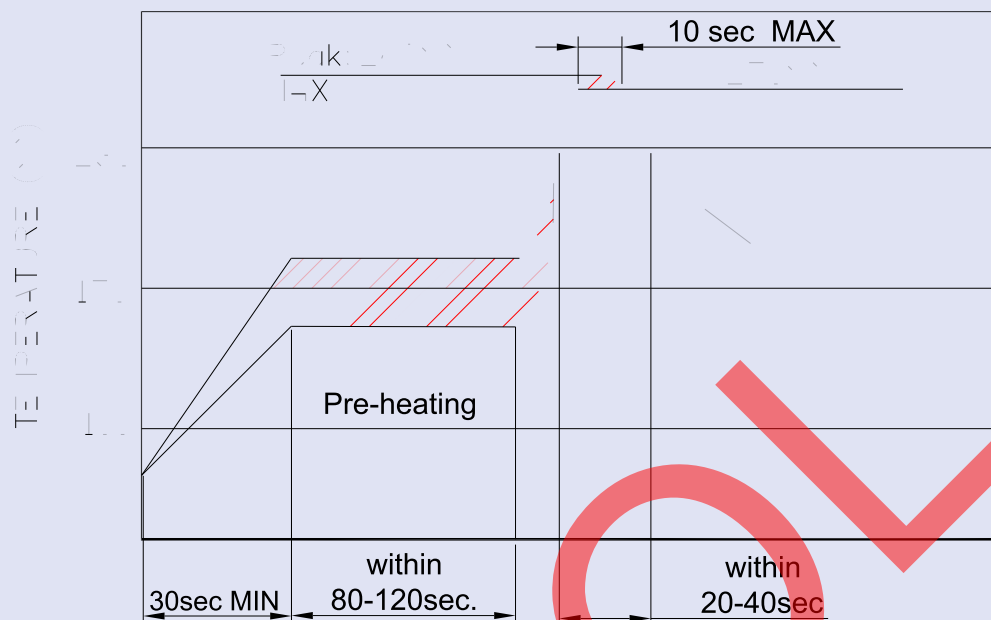


4.7 x 4.1 x 1.2 mm

➤ SUGGESTED REFLOW PROFILE:

ROHS reflow profile high temperature

(applies to parts manufactured after 2/1/2007 -lot# later than 07 01 xxx)



ROHS reflow profile

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

