

ECN/PCN No.: 4636

For Manufacturer			
<b>Product Description:</b> Ceramic Resonator	<b>Abracon Part Number / Part Series:</b> AWSCR-MT Series	<input type="checkbox"/> Documentation only <input checked="" type="checkbox"/> ECN <input type="checkbox"/> EOL	<input type="checkbox"/> Series <input checked="" type="checkbox"/> Part Number
<b>Affected Revision:</b> D	<b>New Revision:</b> EOL	<b>Application:</b>	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
<b>Prior to Change:</b> Active AWSCR-MT Rev D			
<b>After Change:</b> EOL			
<b>Cause/Reason for Change:</b> Discontinuation of manufacturing capability.			
Change Plan			
<b>Effective Date:</b> 4/10/2023	<b>Additional Remarks:</b>		
<b>Change Declaration:</b>			
<b>Issued Date:</b> 4/10/2023	<b>Issued By:</b> Stephanie Lopez	<b>Issued Department:</b> Engineering	
<b>Approval:</b> Thomas Culhane Engineering Director	<b>Approval:</b> Reuben Quintanilla Quality Director	<b>Approval:</b> Ying Huang Purchasing Director	
For Abracon EOL only			
<b>Last Time Buy (if applicable):</b> N/A	<b>Alternate Part Number / Part Series:</b> <a href="#">AWSCR-MTD</a>		
<b>Additional Approval:</b>	<b>Additional Approval:</b>	<b>Additional Approval:</b>	
Customer Approval (If Applicable)			
<b>Qualification Status:</b> <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
<b>Customer Part Number:</b>		<b>Customer Project:</b>	
<b>Company Name:</b>	<b>Company Representative:</b>	<b>Representative Signature:</b>	
<b>Customer Remarks:</b>			

# INDUSTRIAL GRADE BUILT-IN CAPACITANCE CERAMIC RESONATOR

AWSCR



4.7 x 4.1 x 1.2 mm

AWSCR-MT

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

RoHS  
Compliant

## 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)

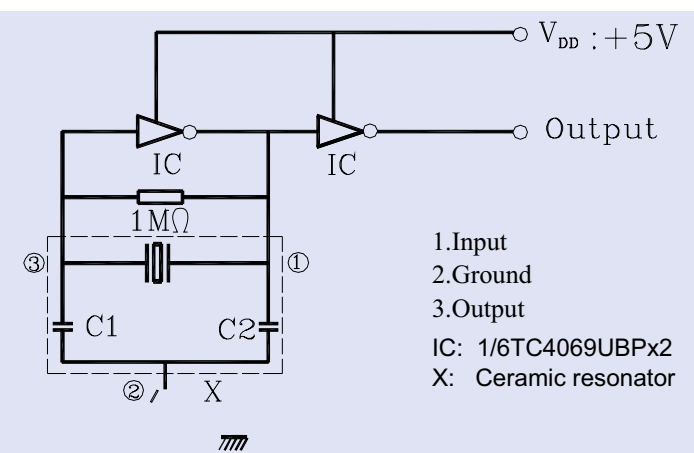
TABLE 2.2

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:



## 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

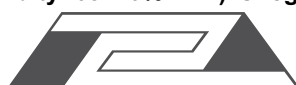
### Load Capacitance

ex. 5pF-20pF

Contact ABRACON for Load Capacitance options

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

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30332 Esperanza, Rancho Santa Margarita, California 92688

tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

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AWSCR



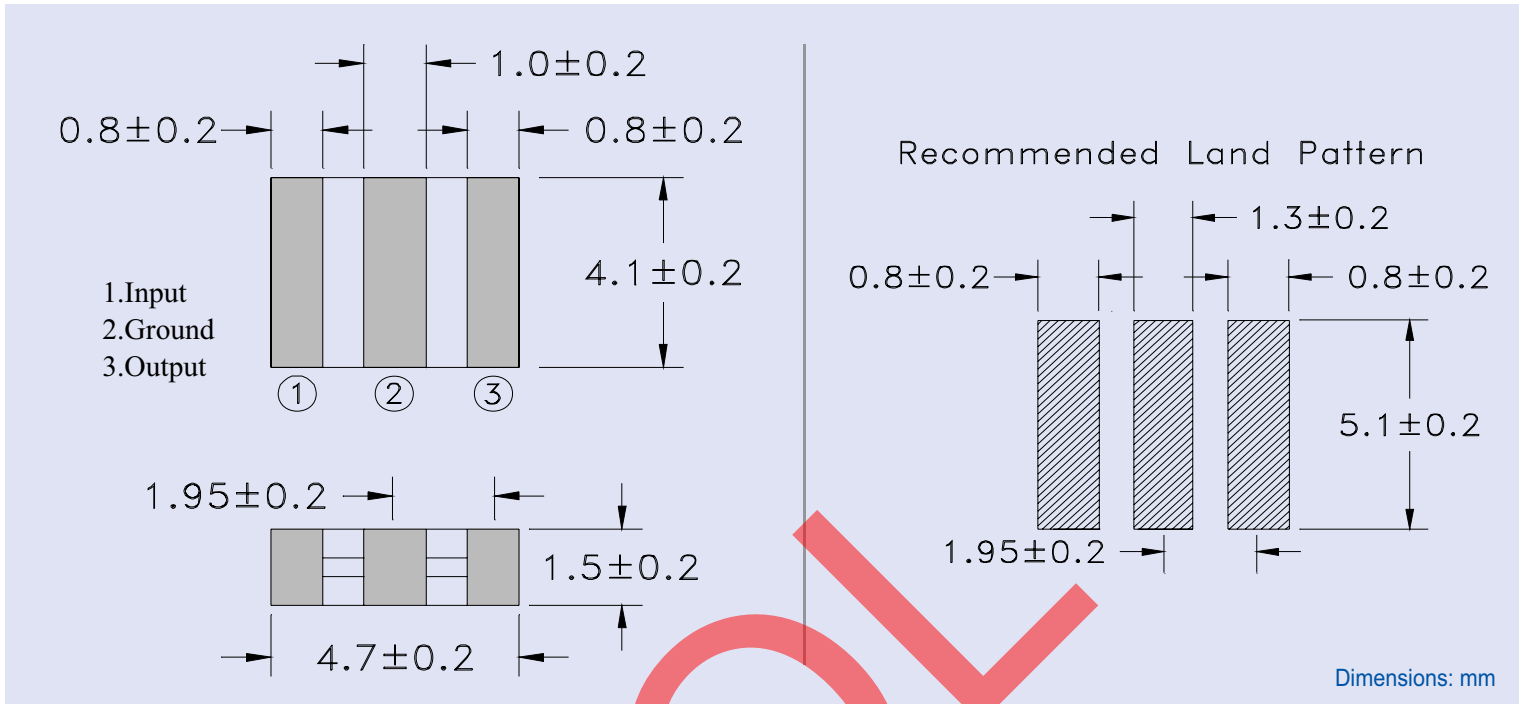
4.7 x 4.1 x 1.2 mm

AWSCR-MT

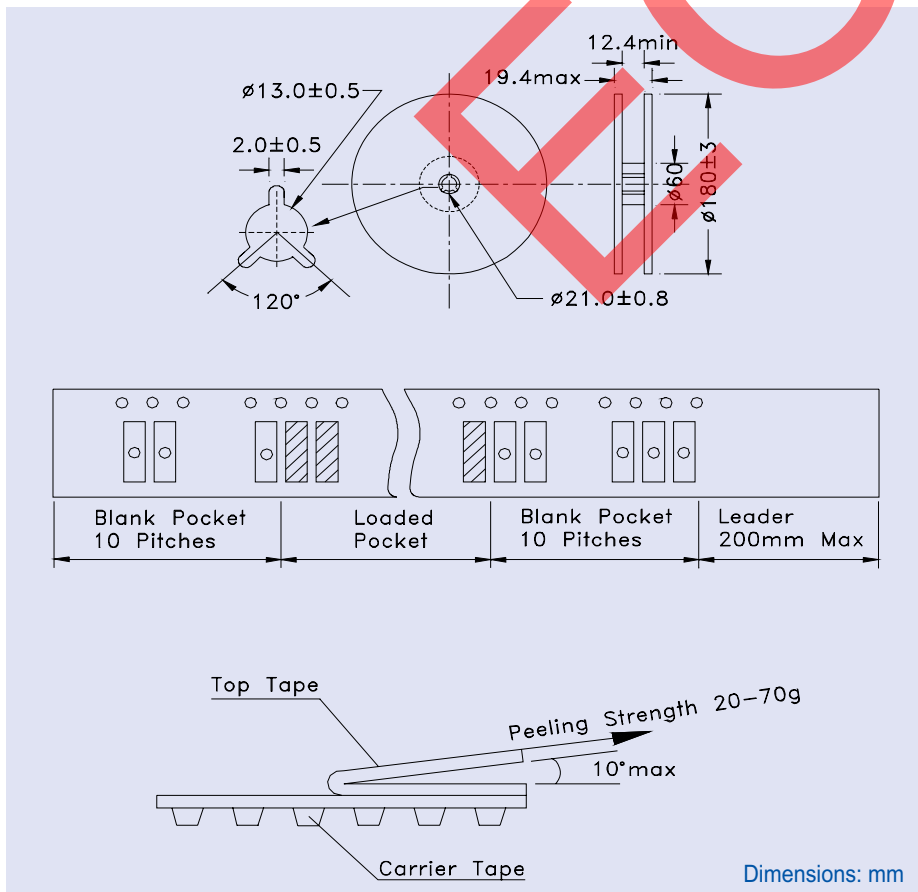
Pb in ceramic  
(exempt per RoHS 2002/95/EC Annex (7))

RoHS  
Compliant

## OUTLINE DRAWING:



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



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AWSCR



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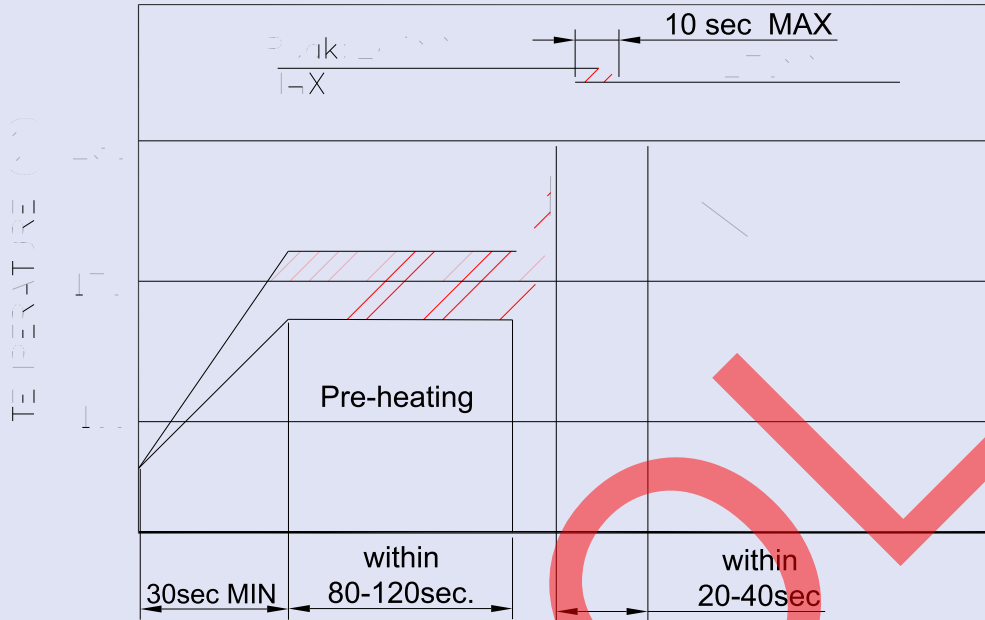
AWSCR-MT

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RoHS  
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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)



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

