

ECN/PCN No.: 4636

| For Manufacturer | | | |
|--|--|--|--|
| Product Description: Ceramic Resonator | Abracon Part Number / Part Series: 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 |
| Affected Revision: D | New Revision: EOL | Application: | <input type="checkbox"/> Safety <input checked="" type="checkbox"/> 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: <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> | | | |
| Customer Part Number: | | Customer Project: | |
| Company Name: | Company Representative: | Representative Signature: | |
| Customer Remarks: | | | |

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) |

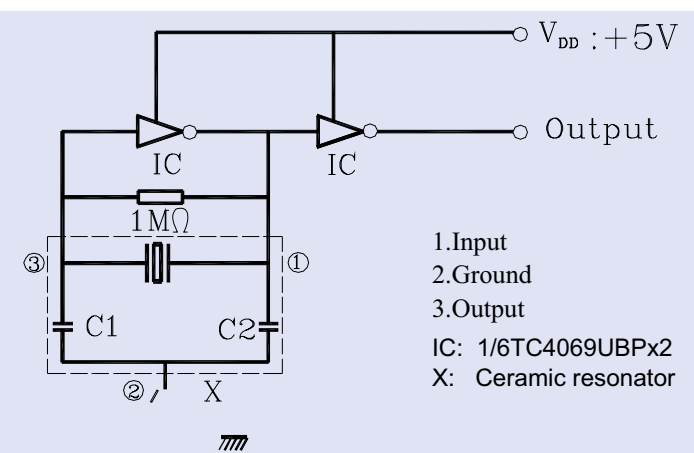
TABLE 2.2

| 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

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CORPORATION

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AWSCR



4.7 x 4.1 x 1.2 mm

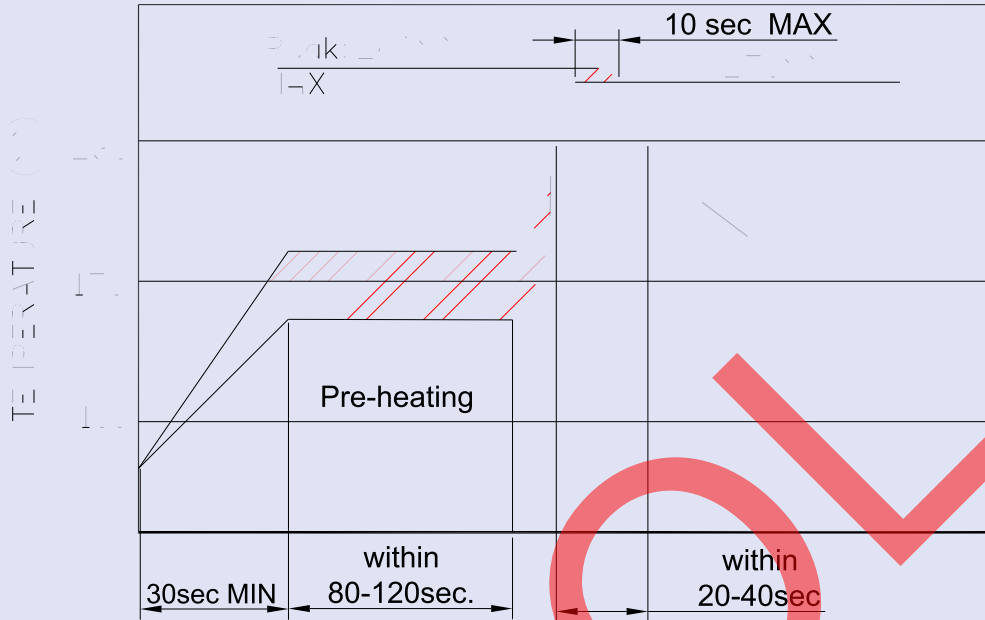
AWSCR-MT

Pb in ceramic
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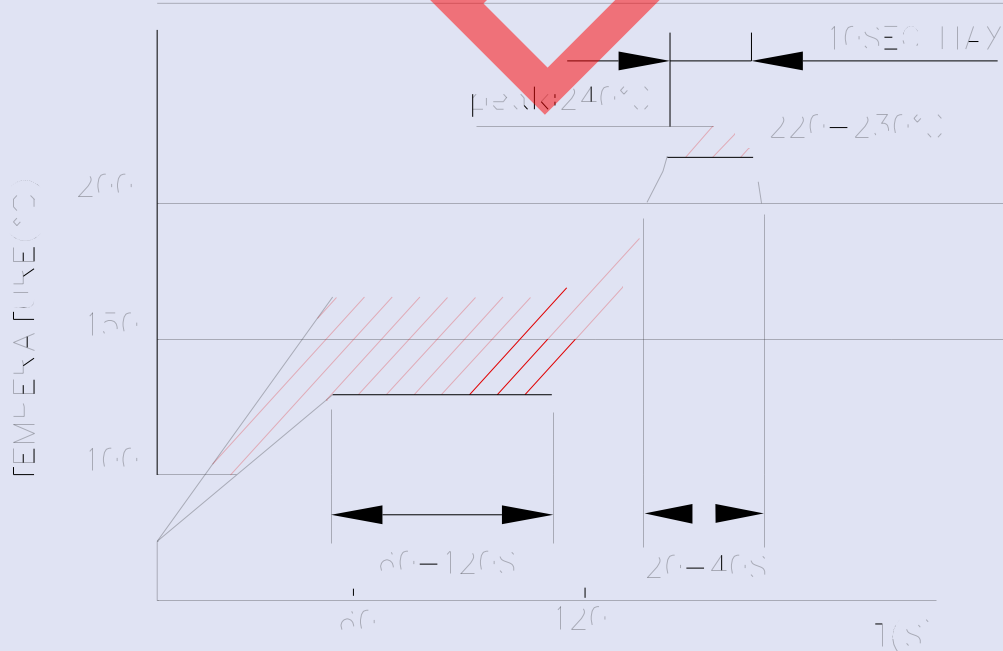
RoHS
Compliant

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)



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View AWSCR-24.00MTD-T on WIN SOURCE](#)
- ⊖ [Abracon LLC Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management