

Excellent Integrated System Limited

Stocking Distributor

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[Abracon Corporation](#)

[AWSCR-8.00CV-T](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

3.7 x 3.1mm Industrial Grade Built-in Capacitance Ceramic Resonator

AWSCR-CV

Pb in ceramic, exemption (7c-I)

RoHS/RoHS II compliant



3.7 x 3.1 x 1.0mm

Moisture Sensitivity Level (MSL) – This product is not Moisture Sensitive - MSL = 1

FEATURES:

- Low resonant impedance
- Built-in load capacitors
- IR reflow capable

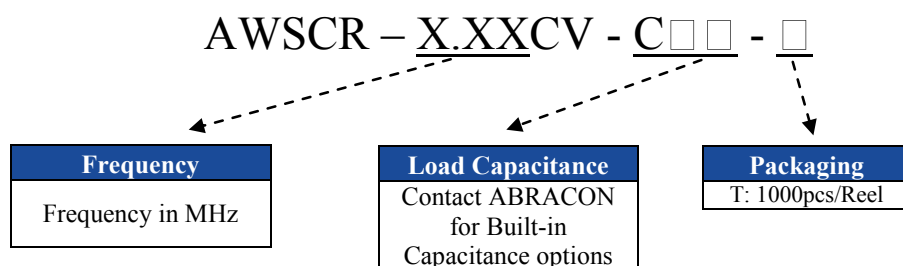
APPLICATIONS:

- Remote controls, Microprocessor clocks, Mobile phones, DVD & CD-Roms, Electric appliances
- Consumer electronics

STANDARD SPECIFICATIONS:

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|---------------------------------------|------------------|---------|----------|------------|-----------------------|
| Frequency Range | 8.00 | | 13.00 | MHz | |
| | 16.00 | | 60.00 | | |
| Resonant Impedance (Ro) | | | 30 | Ω | 8.00 MHz – 13.00 MHz |
| | | | 60 | | 13.01 MHz – 15.99 MHz |
| | | | 40 | | 16.00 MHz – 20.00 MHz |
| | | | 40 | | 20.01 MHz – 25.99 MHz |
| | | | 40 | | 26.00 MHz – 60.00 MHz |
| Standard Built-in Capacitance (C1=C2) | 22 – 20% | 22 | 22 + 20% | pF | 8.00 MHz – 13.00 MHz |
| | 22 – 20% | 22 | 22 + 20% | | 13.01 MHz – 15.99 MHz |
| | 22 – 20% | 22 | 22 + 20% | | 16.00 MHz – 20.00 MHz |
| | 10 – 20% | 10 | 10 + 20% | | 20.01 MHz – 25.99 MHz |
| | 5 – 20% | 5 | 5 + 20% | | 26.00 MHz – 60.00 MHz |
| Frequency Tolerance @25 °C | -0.5 | | 0.5 | % | |
| Frequency Stability @ -25°C to +85°C | -0.4 | | 0.4 | % | 8.00 MHz – 13.00 MHz |
| | -0.3 | | 0.3 | | 13.01 MHz – 60.00 MHz |
| Withstanding Voltage | | 50 | | V | DC , 1 min |
| Rating Voltage | (1) D.C.Voltage | | 6 | V | |
| | (2) A.C. Voltage | | 15 | Vp-p. | |
| Insulation Resistance | 100 | | | M Ω | 10V, 1min |
| Operation Temperature | -25 | | 85 | °C | |
| Storage Temperature | -55 | | 85 | °C | |
| Aging Rate (Fosc) (10 years) | -0.3 | | 0.3 | % | |

OPTIONS AND PART IDENTIFICATION:



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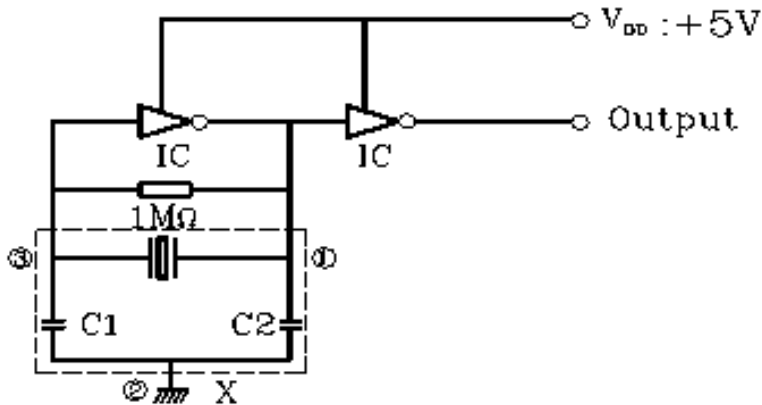
RoHS/RoHS II compliant



3.7 x 3.1 x 1.0mm

TEST CIRCUIT:

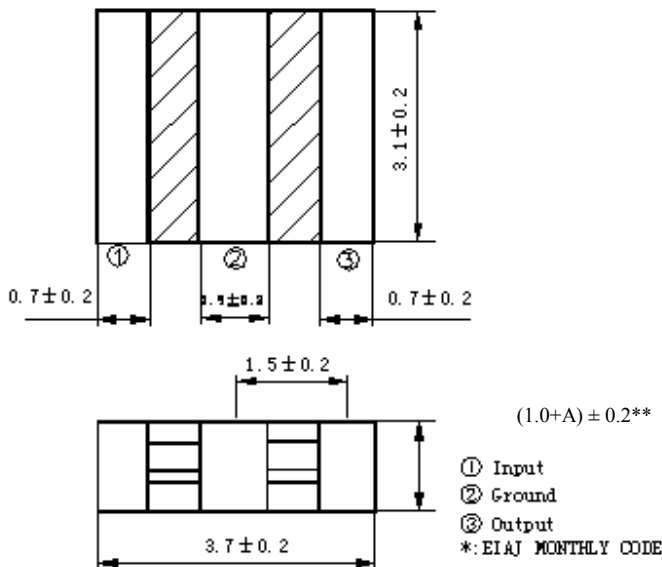
Parts shall be measured under a condition (Temp.: $20 \pm 15^\circ\text{C}$, Humidity: $65 \pm 20\%$ R.H.) unless the standard condition (Temp: $25 \pm 3^\circ\text{C}$, Humidity: $65 \pm 10\%$ R.H.) is regulated to measure



X: Ceramic Resonator

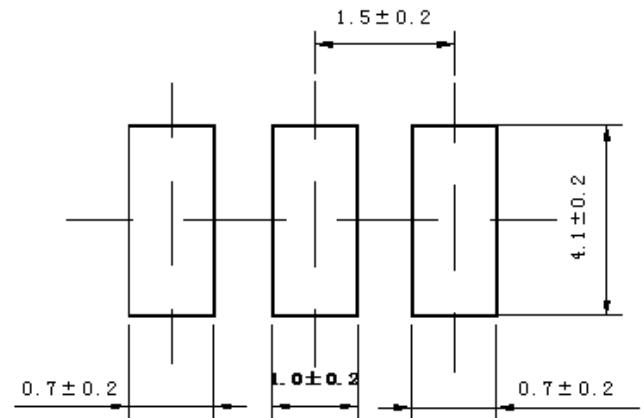
1. Input
2. Ground
3. Output

OUTLINE DRAWING:



** A stands for the thickness of the ceramic element, which varies with the frequency

Recommended Land Pattern



Dimension: mm

3.7 x 3.1mm Industrial Grade Built-in Capacitance Ceramic Resonator

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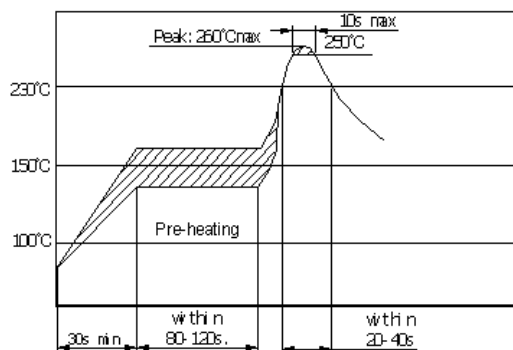
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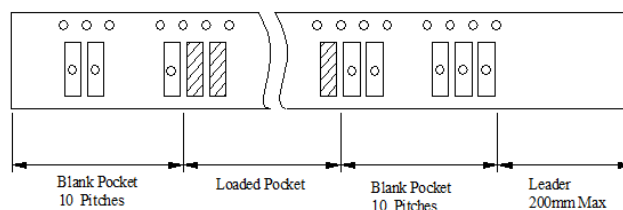
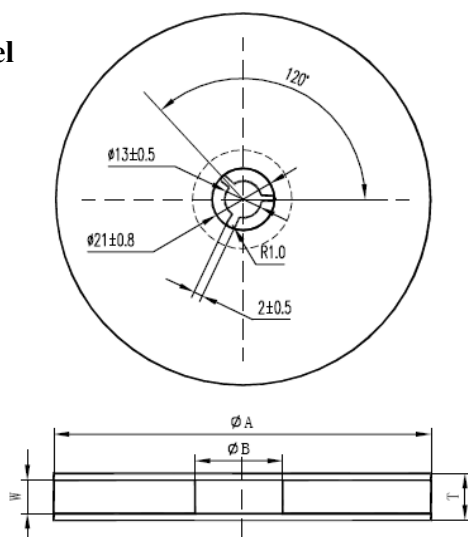
3.7 x 3.1 x 1.0mm

SUGGESTED REFLOW:



TAPE & REEL:

Packaging:
T: 1000pcs/Reel



| Reel Quantity | ΦA | ΦB | W | T | Pieces per reel | Carrier tape size |
|---------------|-------|---------|----------|----------|-----------------|-------------------|
| 1000 (T) | 180±3 | 60 min. | 12.4 min | 19.4 max | 1000 typ. | 12 |

Note: upon opening the original packaging, it is recommended that the product be used within 1 year. If the product will not be used within 1 year, it is recommended that the product be re-sealed in airtight packaging according to MSL 1 requirements to maintain solderability.

Dimensions: mm

CAUTION:

- (1) Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
- (2) This component is not hermetically sealed. Do not clean or wash the component.
- (3) Reflow Soldering: Do not use strong acidity flux, such as flux with chlorine content of greater than 0.2wt% during Reflow Soldering.
- (4) Do not expose the component to open flame.
- (5) This specification applies to the functionality of the component as a single unit.
- (6) Storage Conditions: If the product is to be stored for a period greater than Six Months after the Delivery Date, it is recommended that customers confirm the solderability and characteristics for the product prior to use.
- (7) This product is not recommended for use in the following applications: Automotive, Medical, Military, Safety, or any other high-reliability, life dependant applications. Contact Abracon Corporation prior to using this product when in doubt.