

2.5 x 2.0 x 1.2mm BUILT-IN CAPACITANCE CERAMIC RESONATOR



AWSCR-CW

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

RoHS
Compliant

2.5 x 2.0 x 1.2mm

FEATURES:

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

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

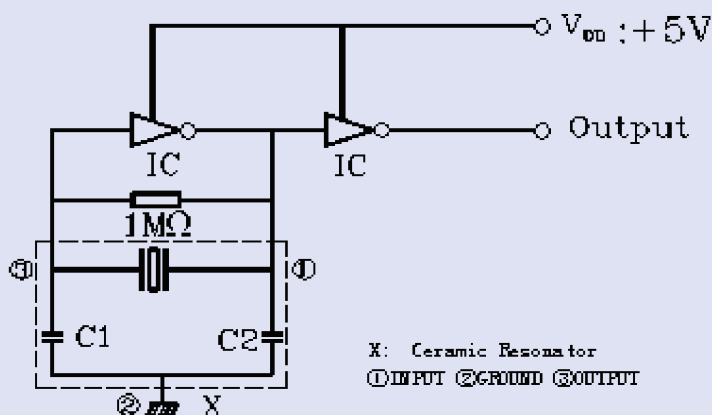
| Item | Requirement |
|------------------------------|---|
| Frequency Range | 20.00MHz to 48.00 MHz |
| Resonant Impedance | See Table 2.1 |
| Frequency Tolerance | ± 0.5% (at 25°C) |
| Frequency stability | ±0.2% (-25°C~+85°C) max* |
| Withstanding Voltage (V) | 50 (DC , 1 min) |
| Rating Voltage | |
| (1) D.C.Voltage | 6 V DC max |
| (2) A.C. Voltage | 15 Vp-p. max |
| Built-in Capacitance (C1=C2) | 10pF± 20% (20.00 to 25.99 MHz) 5pF± 20% (26.00 to 48.00 MHz) |
| Insulation Resistance | 100MΩ min. (10V, 1min) |
| Operating Temperature | -25°C to +85°C* |
| Storage Temperature | -55°C to +85°C |
| Aging Rate (Fosc) | ±0.2% max. (From initial value) |

Table 2.1

| Frequency range (MHz) | Resonant Impedance (Ro)(Ω) max |
|-----------------------|--------------------------------|
| 20.00 MHz - 25.99 MHz | 60 |
| 26.00 MHz - 35.00 MHz | 50 |
| 35.01 MHz - 48.00 MHz | 50 |

* Please contact ABRACON for tighter stability and/or wider temperature range

TEST CIRCUIT:



OPTIONS AND PART IDENTIFICATION:

AWSCR - XX.XXCW - C□□ - □

Frequency
Frequency in MHz

Load Capacitance
Contact ABRACON for Load Capacitance options

Packaging
T for Tape and Reel



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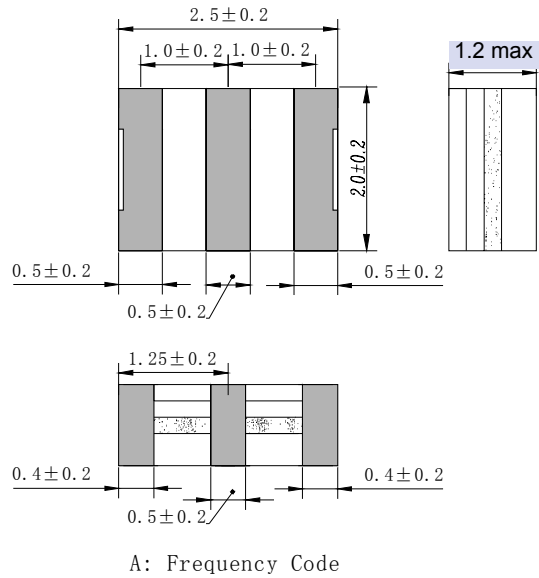
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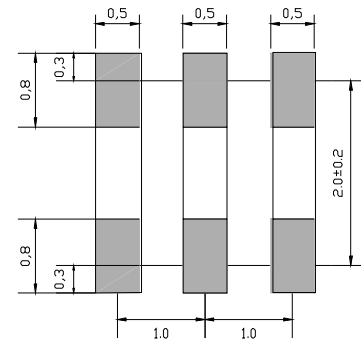
2.5 x 2.0 x 1.2mm

OUTLINE DRAWING:

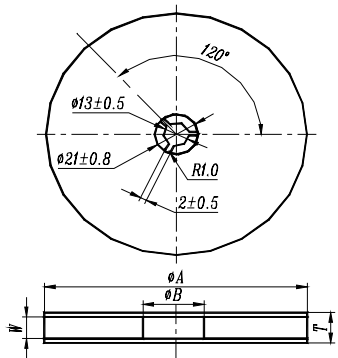
Dimensions: mm



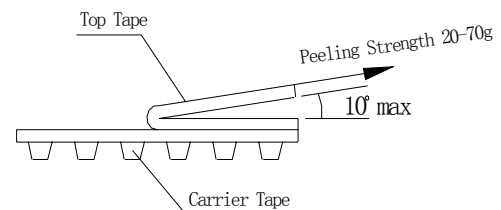
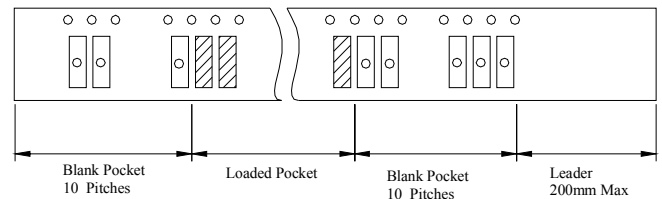
RECOMMENDED LAND PATTERN



TAPE & REEL:



| ϕA | ϕB | W | T | Pieces per reel | Carrier tape size |
|-------------|----------|--------|---------|-----------------|-------------------|
| 180 ± 3 | 60min | 8.4min | 12.4max | 3000typ. | 8 |



Dimension : mm

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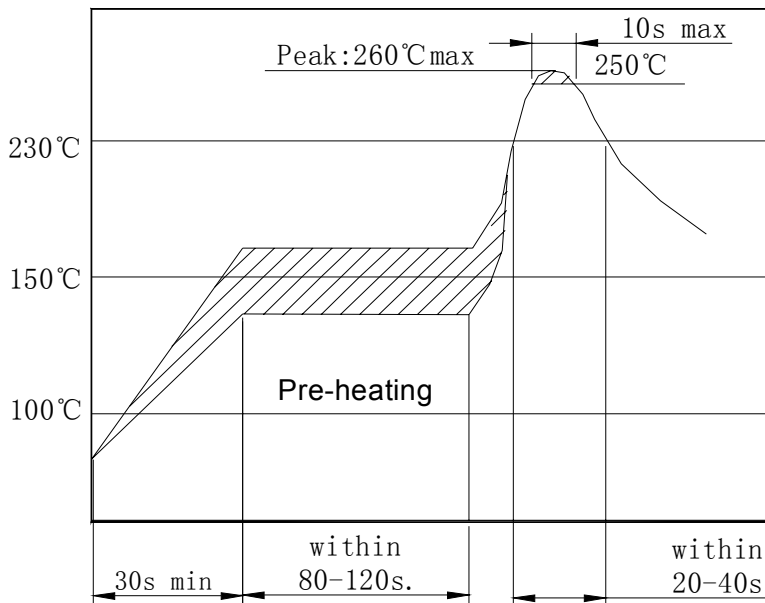
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REFLOW PROFILE:



CAUTION

- 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.
- This component is not hermetically sealed. Do not clean or wash the component.
- Reflow soldering: Do not use strong acidity flux, such as flux with chlorine content of greater than 0.2wt% during reflow Soldering.
- Do not expose the component to open flame.
- This specification applies to the functionality of the component as a single unit. Customers are advised to insure that the component is thoroughly evaluated in the particular application.
- Shelf life: The warranted shelf life of this product is six months after the delivery date under the conditions of sealed, unopened, original packaging.
- 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.
- This product is not recommended for use in the following applications: Automotive, Medical, Military, Safety, or any other high-reliability, life-dependant application. Contact Abracon Corporation prior to using this product when in doubt.

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO9001:2008
CERTIFIED



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