

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



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**AWSCR-CW**

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

**RoHS**  
Compliant

## 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:

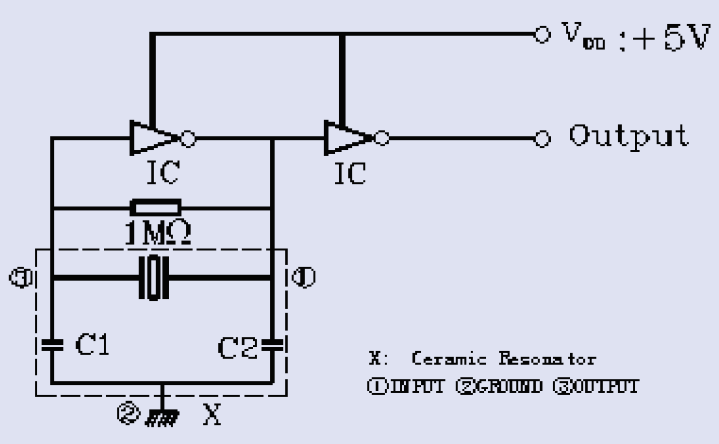
| Item                         | Requirement   |
|------------------------------|---|
| Frequency Range              | 20.00MHz to 48.00 MHz   |
| Resonant Impedance           | See Table 2.1   |
| Frequency Tolerance          | ± 0.5% ( at 25°C)   |
| Frequency stability          | ±0.2% (-25°C~+85°C) 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)<br>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

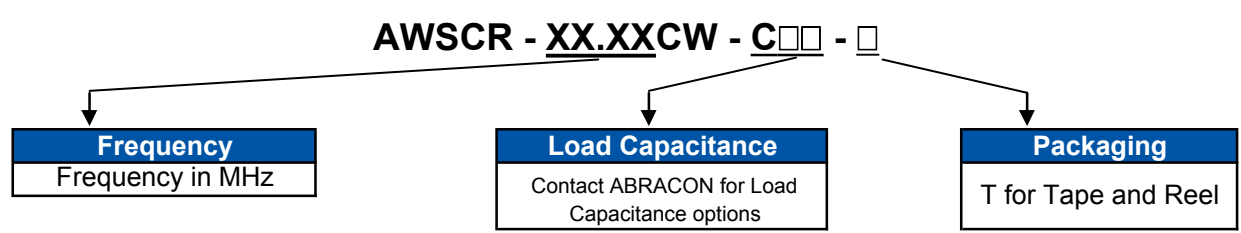
| Frequency range (MHz) | Resonant Impedance (Ro)(Ω) max |
|-----------------------|--------------------------------|
| 20.00 MHz - 25.99 MHz | 60                             |
| 26.00 MHz - 35.00 MHz | 50                             |
| 35.01 MHz - 48.00 MHz | 50                             |

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

## TEST CIRCUIT:



## OPTIONS AND PART IDENTIFICATION:



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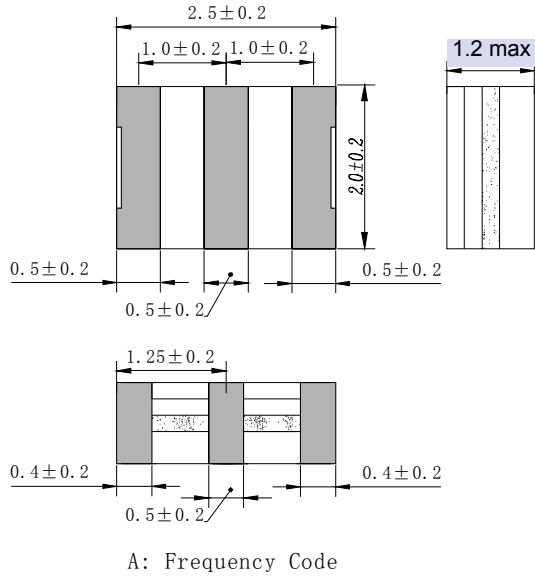
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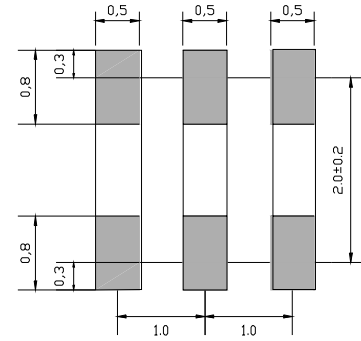
**RoHS**  
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## OUTLINE DRAWING:

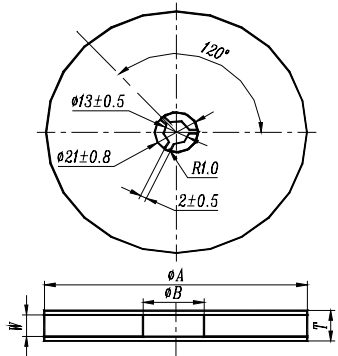
Dimensions: mm



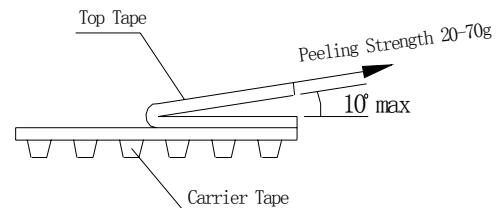
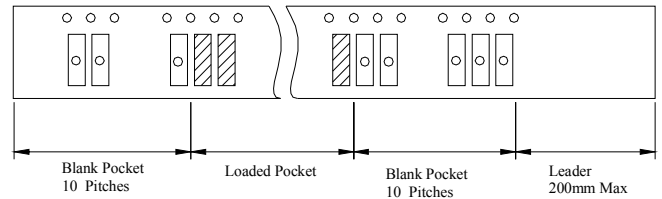
## RECOMMENDED LAND PATTERN



## TAPE & REEL:



| $\phi A$    | $\phi B$ | W      | T       | Pieces per reel | Carrier tape size |
|-------------|----------|--------|---------|-----------------|-------------------|
| $180 \pm 3$ | 60min    | 8.4min | 12.4max | 3000typ.        | 8                 |



Dimension : mm

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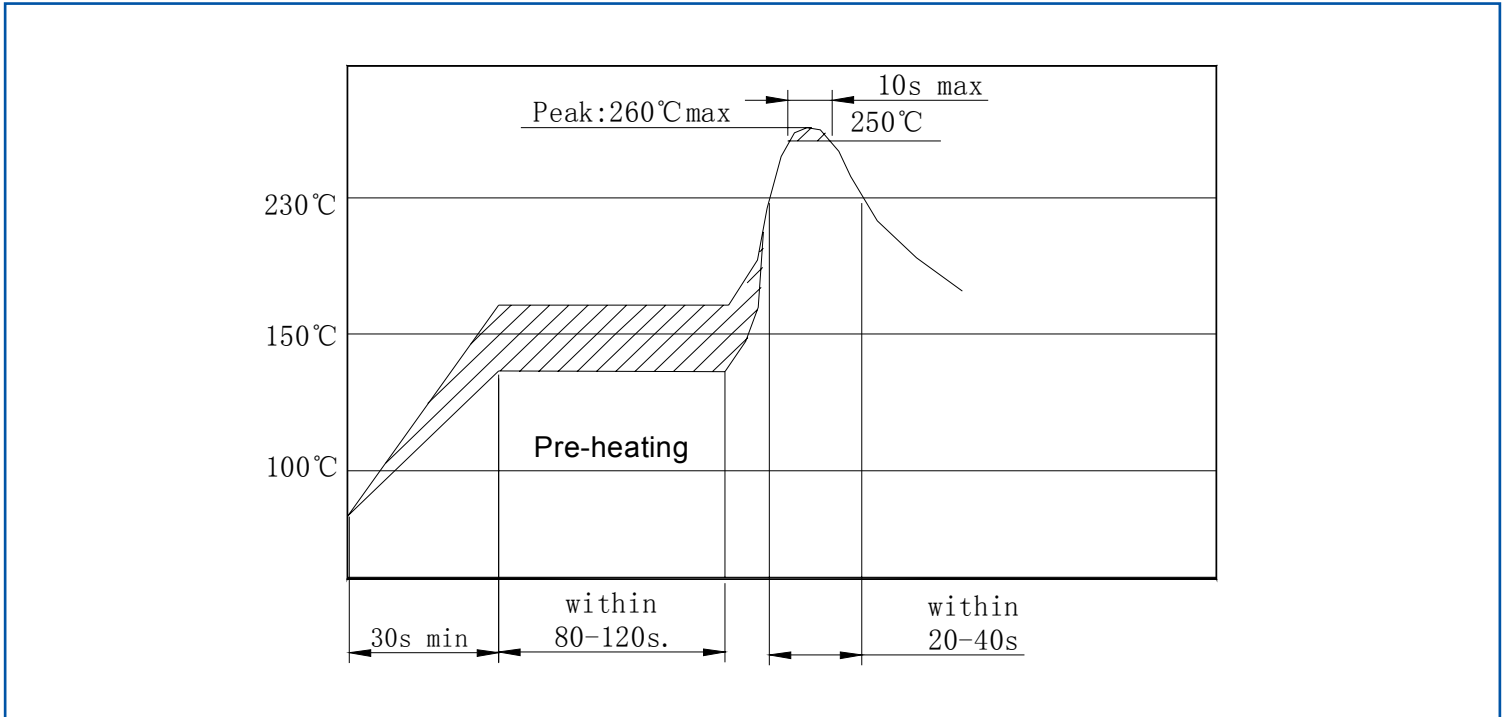
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## REFLOW PROFILE:



## 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.

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ABRACON IS  
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CERTIFIED



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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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