4.7 x 4.1mm BUILT-IN CAPACITANCE CERAMIC RESONATOR



4.7 x 4.1mm

AWSCR-MTD

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:

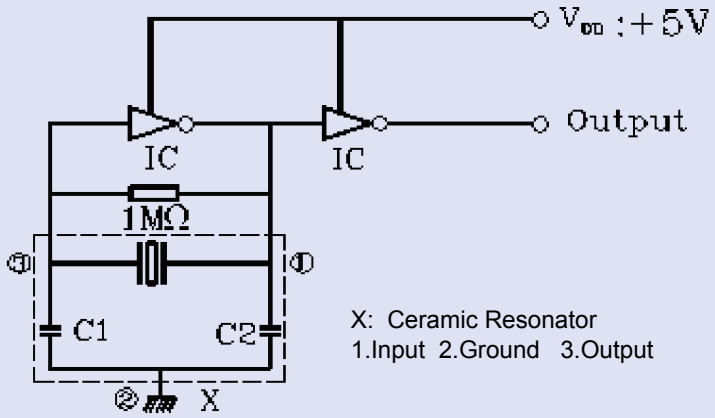
Item	Requirement
Frequency Range	6.00MHz to 50.00MHz
Resonant Impedance	See Table 2.1
Frequency Tolerance	± 0.5%
Frequency Stability max. (-25ºC to +85ºC)	±0.4% (6.00 MHz~13.00 MHz)*
	±0.3% (13.01 MHz~50.00 MHz)
Withstanding Voltage (V)	50 (DC , 1 min)
Rating Voltage (1) D.C.Voltage	6 V.D.C. max
(2) A.C. Voltage	15 Vp-p. max
Built-in Capacitance	See Table 2.1
Insulation Resistance	100MΩ min. (10V, 1min)
Operation Temperature	-25ºC to +85ºC*
Storage Temperature	-55°C to +85°C
Aging Rate (Fosc)	±0.3% max. (10 years)

Table 2.1

Frequency Range (MHz)	Resonant Impedance (Ro)(Ω)	Standard Built-in Capacitance C1=C2 (pF)
6.00 MHz - 13.00 MHz	30	22pF ±20%
13.01 MHz - 16.00 MHz	40	22pF ±20%
16.01 MHz - 25.99 MHz	40	10pF ±20%
26.00 MHz - 50.00 MHz	40	5pF ±20%

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

TEST CIRCUIT:



X: Ceramic Resonator
1.Input 2.Ground 3.Output

Parts shall be measured under a condition (Temp.: 20±15°C, Humidity: 65±20% R.H.) unless the standard condition (Temp: 25±3°C, Humidity: 65±10% R.H.) is regulated to measure

OPTIONS AND PART IDENTIFICATION:

AWSCR - XX.XXMTD - C□□ - □

Frequency	Load Capacitance	Packaging
Frequency in MHz	Contact ABRACON for Load Capacitance options	T for Tape and Reel (1,000pcs/reel)

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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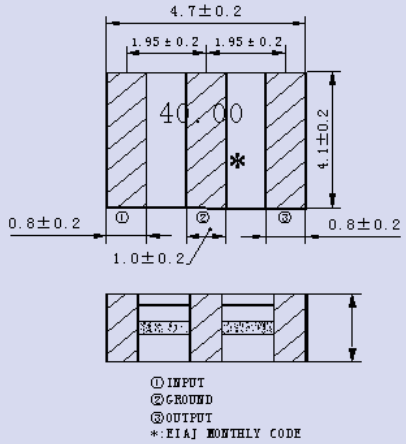
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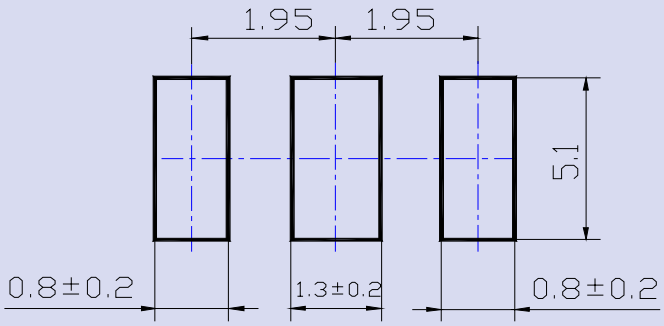
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OUTLINE DRAWING:

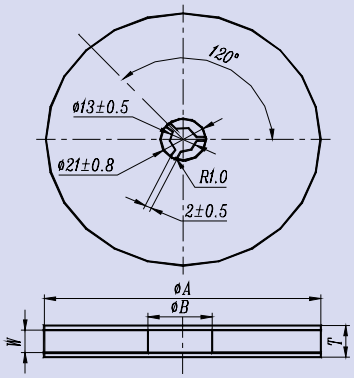


RECOMMENDED LAND PATTERN

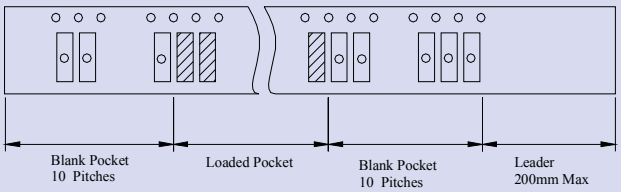


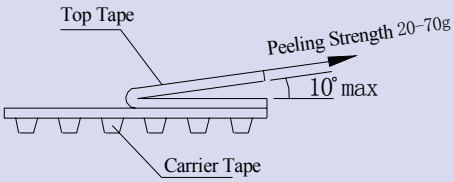
Dimension : mm

TAPE & REEL: (1,000pcs/reel)



ΦA	ΦB	W	T	Pieces per reel	Carrier tape size
180±3	60min	12.4min	19.4max	1000typ.	12





Dimension : mm

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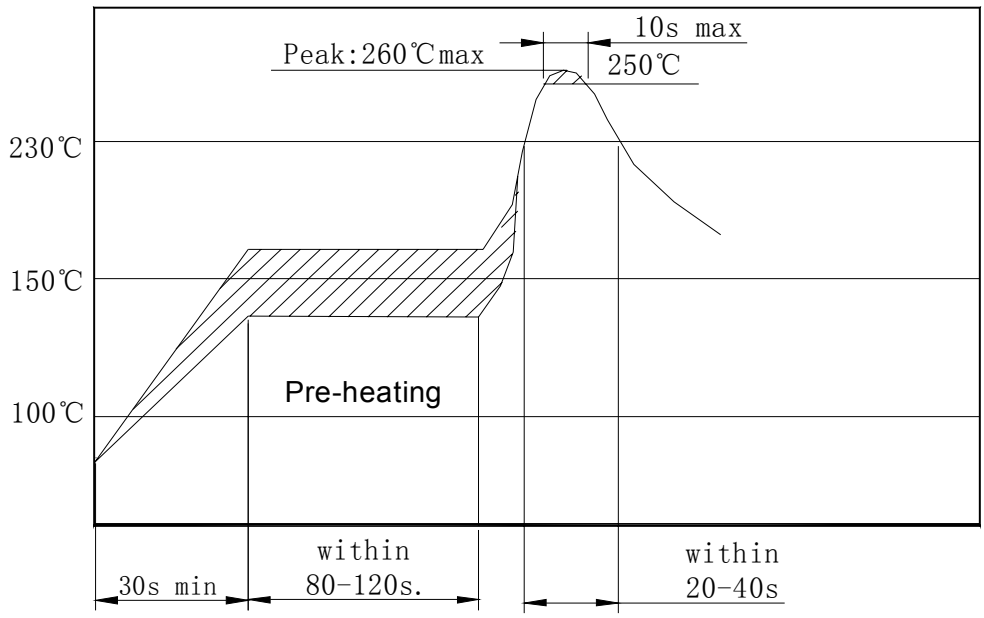
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REFLOW PROFILE:



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.

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