

3.7 x 3.1mm BUILT-IN CAPACITANCE CERAMIC RESONATOR

AWSCR



3.7 x 3.1mm

AWSCR-CV

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:

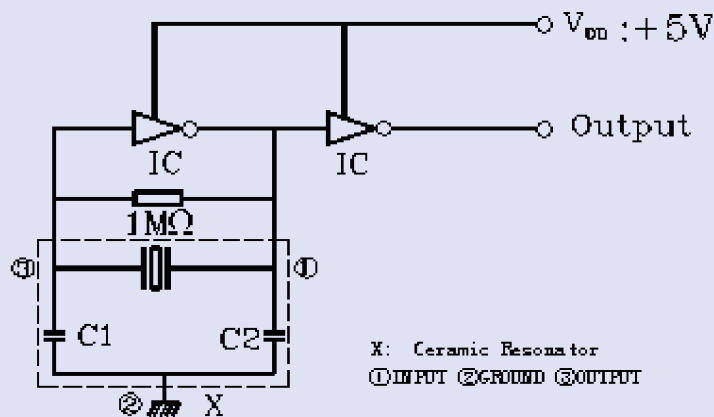
Item	Requirement
Frequency Range	8.00MHz to 50.00 MHz
Resonant Impedance	See Table 2.1
Frequency Tolerance	± 0.5% (at 25°C)
Frequency stability (-25°C~+85°C)*	±0.4% (8.00 MHz~ 13.00 MHz) ±0.3% (13.01 MHz~ 50.00 MHz)
Withstanding Voltage (V)	50 (DC , 1 min)
Rating Voltage	
(1) D.C.Voltage	6 V DC max
(2) A.C. Voltage	15 Vp-p. max
Load Capacitance	See Table 2.1
Insulation Resistance	100MΩ min. (10V, 1min)
Operating Temperature	-25°C to +85°C*
Storage Temperature	-55°C to +85°C
Aging Rate (Fosc)	±0.3% max. (10 years)

Table 2.1

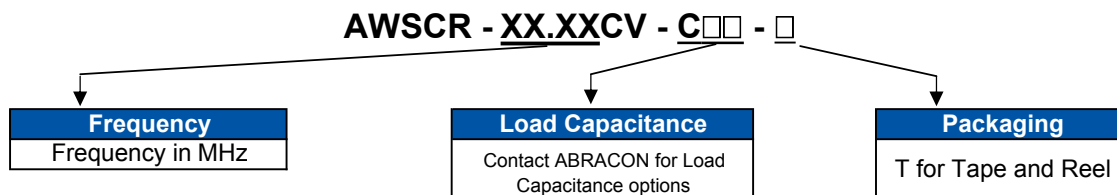
Frequency range (MHz)	Resonant Impedance (Ro)(Ω) max	Standard Load Capacitance C1=C2 (pF)
8.00 MHz - 13.00 MHz	30	20pF± 20%
13.01 MHz - 16.00 MHz	60	20pF± 20%
16.01 MHz - 40.00 MHz	40	10pF± 20%
40.01 MHz - 50.00 MHz	40	5pF± 20%

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

TEST CIRCUIT:



OPTIONS AND PART IDENTIFICATION:



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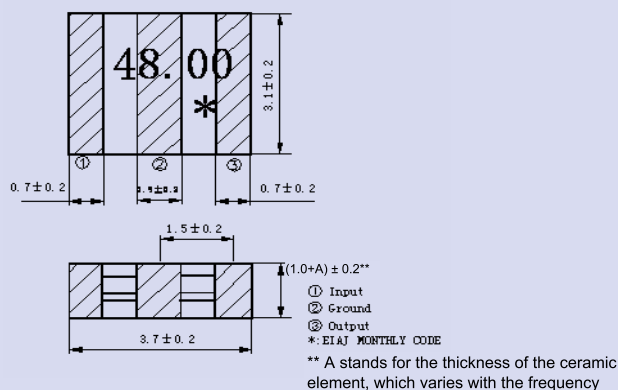
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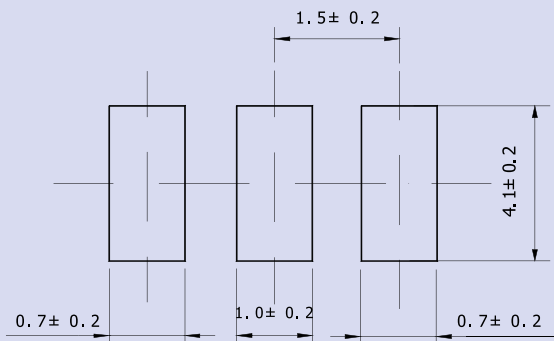
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OUTLINE DRAWING:

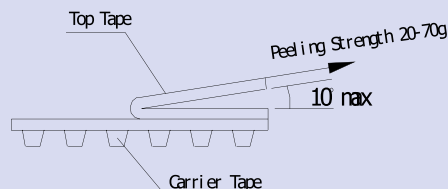
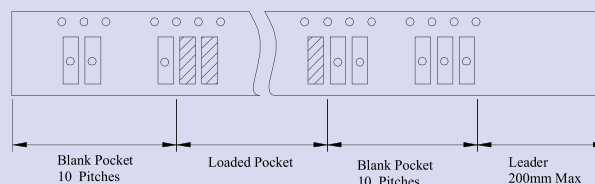
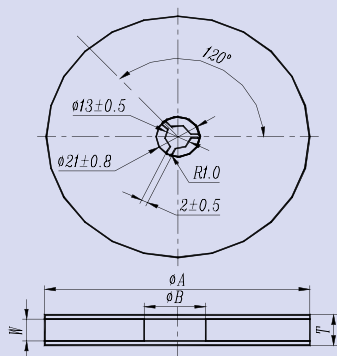


RECOMMENDED LAND PATTERN



Dimension : mm

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



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

Dimension : mm

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. The customer is advised to insure that the component is thoroughly evaluated in the application circuit.
- 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 the customer confirm the solderability and characteristics for the product prior to use.
- This product is not recommended for use in industrial related Automotive, Medical, Safety, Military, or other high-reliability life dependant applications. Contact Abracon Corporation prior to using this product when in doubt.