



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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



3.7 x 3.1 x 1.0mm

AWSCR-CV

Pb in ceramic, exemption (7c-I)

RoHS/RoHS II compliant

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

FEATURES:

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

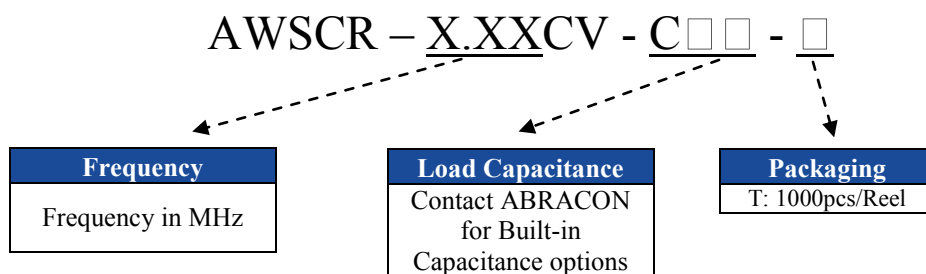
APPLICATIONS:

- 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			MΩ	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:



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



3.7 x 3.1 x 1.0mm

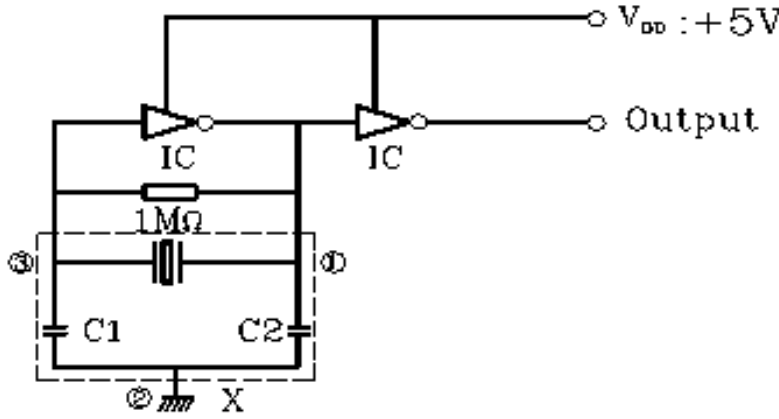
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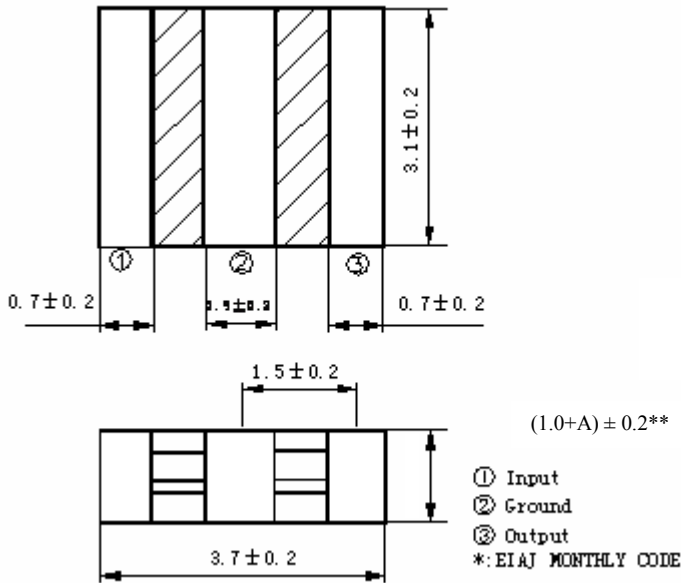
TEST CIRCUIT:

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



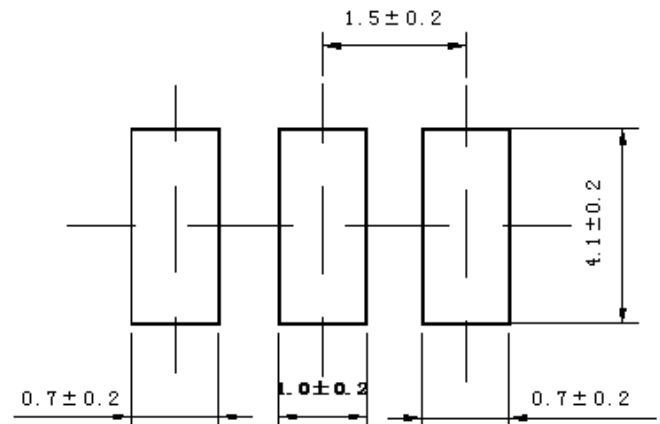
- X: Ceramic Resonator
1. Input
 2. Ground
 3. Output

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



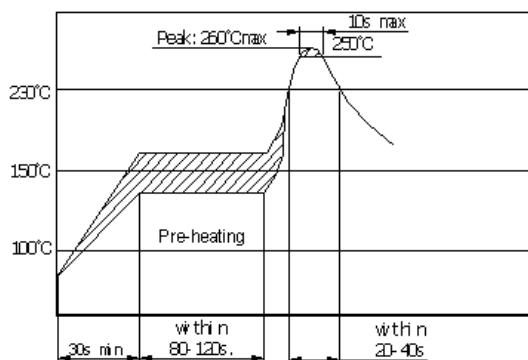
3.7 x 3.1 x 1.0mm

AWSCR-CV

Pb in ceramic, exemption (7c-I)

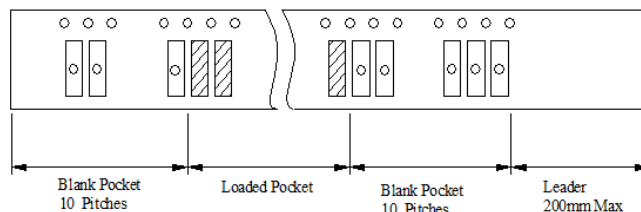
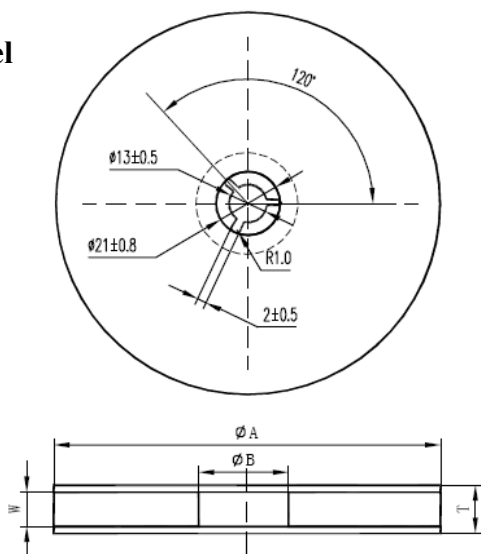
RoHS/RoHS II compliant

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:

- 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.
- 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 applications. Contact Abracon Corporation prior to using this product when in doubt.