

# 3-PAD INDUSTRIAL GRADE CERAMIC RESONATOR



**AWSCR-CP SERIES**

**6.0 x 3.0 x 1.8 mm**

**RoHS/RoHS II Compliant**

Pb in ceramic, exemption (7c-1)

**MSL = 1**

## FEATURES

- Low resonant impedance
- Built-in load capacitors
- Suitable for RoHS compliant reflow
- Low cost solution for cost sensitive applications

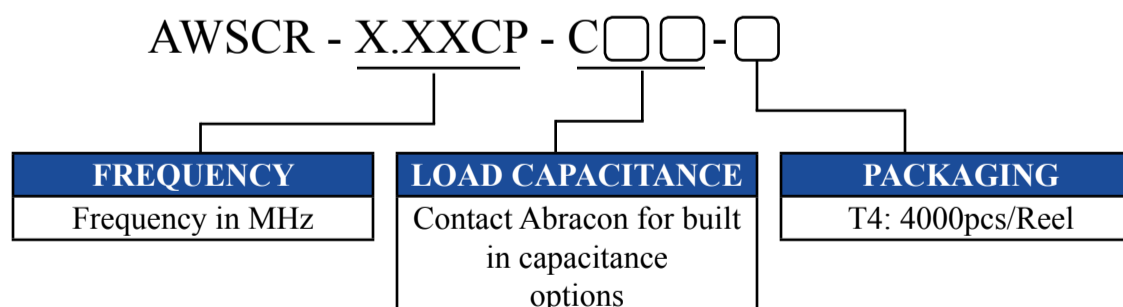
## APPLICATIONS

- Remove controls, microprocessor clocks DVD & CD-ROMs, electric appliances
- Consumer electronics

## STANDARD SPECIFICATIONS

PARAMETERS	MINIMUM	TYPICAL	MAXIMUM	UNITS	NOTES
Frequency Range	2.00		12.00	MHz	
Resonant Impedance (Ro)		100		Ω	2.00 MHz – 2.99 MHz
		50			3.00 MHz – 3.49 MHz
		30			3.50 MHz – 12.00 MHz
Standard Built-in Capacitance (C1=C2)		30		pF	2.00 MHz – 8.00 MHz
		15			8.01 MHz – 12.00 MHz
Frequency Tolerance	-0.5		0.5	%	
Frequency Stability	-0.3		0.3	%	
Withstanding Voltage			50	V	-25°C TO +85°C
Rating Voltage	(1) D.C. Voltage		6	V	DC , 1 MIN.
	(2) A.C. Voltage		15	Vp-p.	
Insulation Resistance	100			MΩ	10V, 1 MIN.
Operation Temperature	-25		+85	°C	
Storage Temperature	-55		+85	°C	
Aging Rate (Fosc)	-0.1		0.1	%	10 years

## OPTIONS AND PART IDENTIFICATION (LEFT BLANK IF STANDARD)



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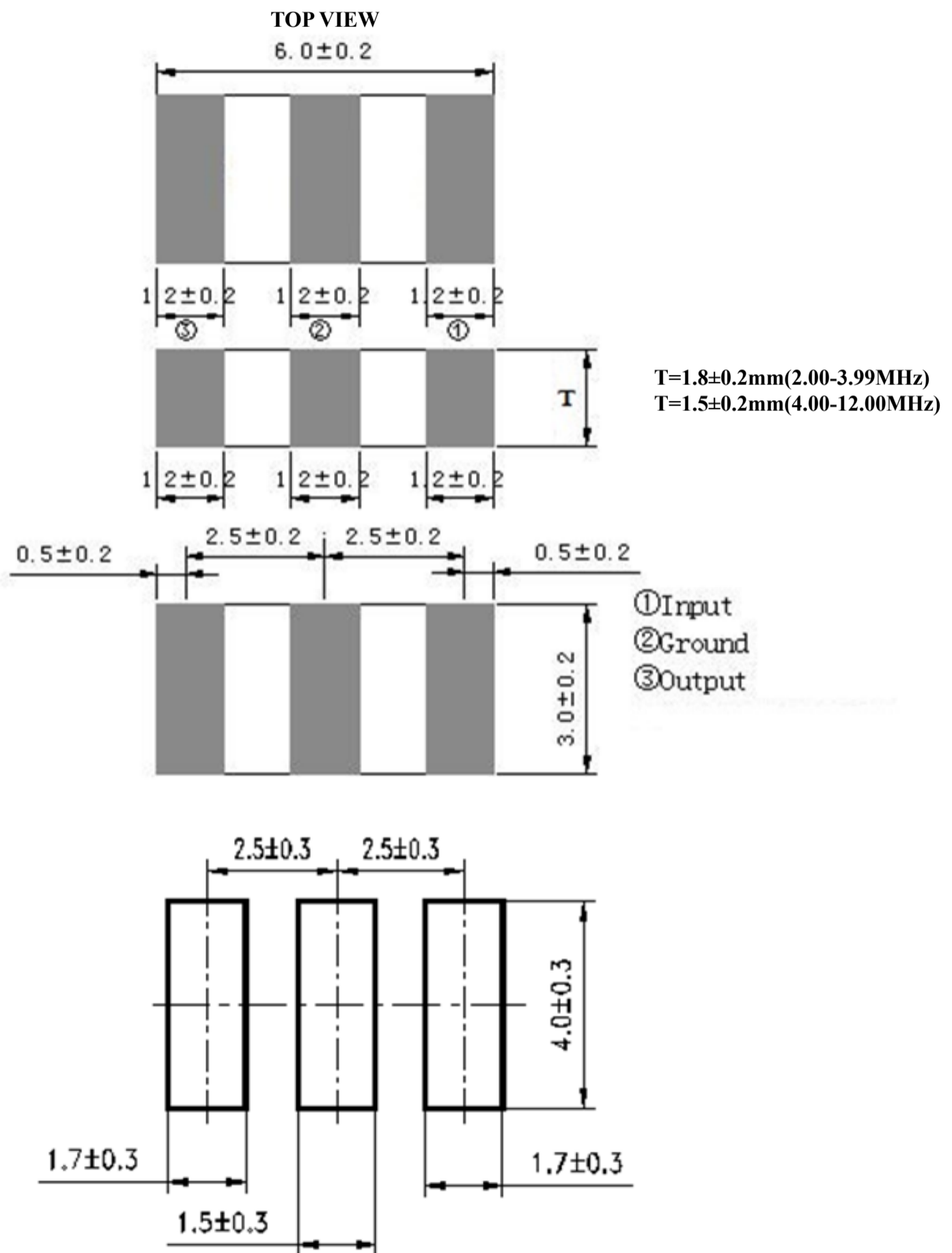
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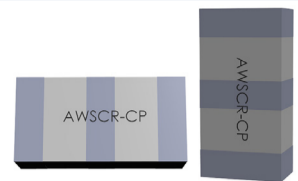
## OUTLINE DIMENSIONS



RECOMMENDED LANDING PATTERN (mm)

REVISED: 12.19.2016

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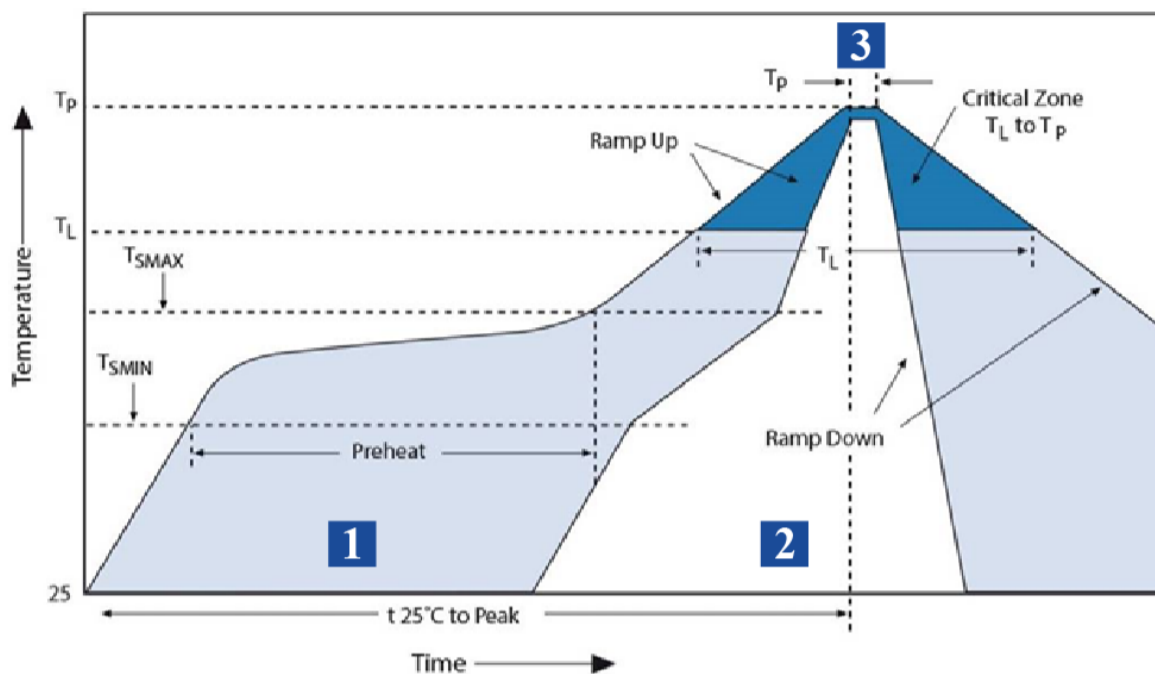
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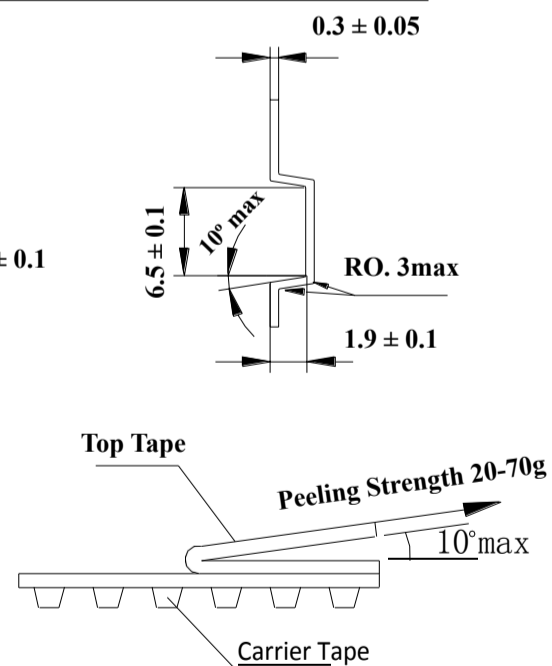
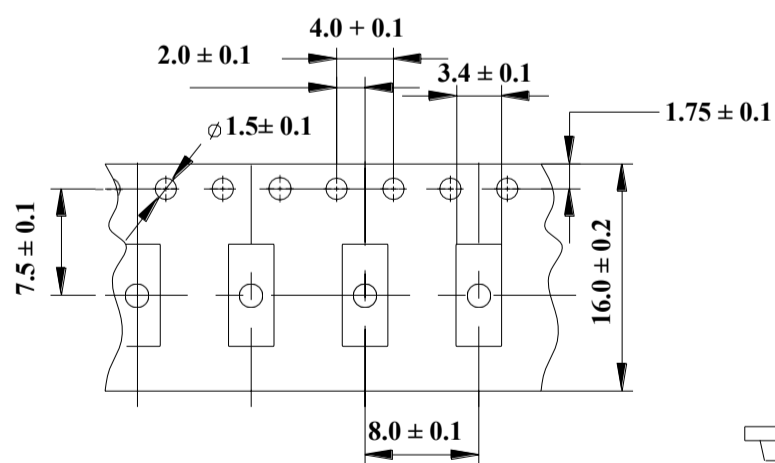
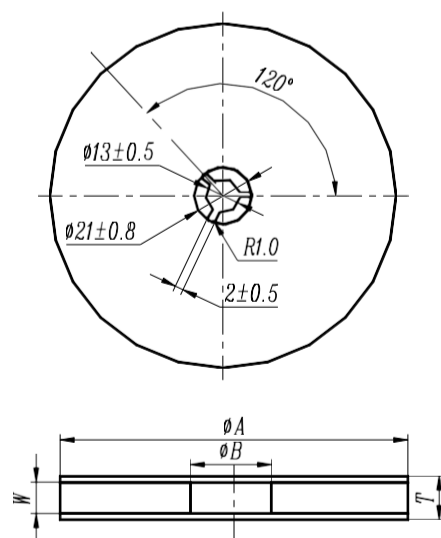
## REFLOW



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	80~120 sec.
2	Reflow	$T_L$ 230 °C	20~40 sec.
3	Peak Heat	$T_P$ 260 °C	10 sec. MAX

## TAPE AND REEL

PACKAGING: T4: 4000PCS/REEL



φA	φB	W	T	Pieces per reel	Carrier tape size
330±3	80min	16.4min	22.4max	4000typ.	16



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ABRACON IS  
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 CERTIFIED

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## CAUTION

1. Don't apply excess mechanical stress to the component and terminals at soldering. Do not use this product with bend.
2. Do not clean or wash the component for it is not hermetically sealed.
3. Do not use strong acidity flux, more than 0.2wt% chlorine content, in flow soldering.
4. Don't be close to fire.
5. This specification mentions the quality of the component as a single unit. Please insure the component is thoroughly evaluated in your application circuit
6. Expire date (Shelf life) of the products is 12 months after delivery under the conditions of a sealed and an unopened package. Please use the products within 12 months after delivery. If you store the products for a long time (more than 12 months), use carefully because the products may be degraded in the solderability or rusty. Please confirm solderability and characteristics for the products regularly.

## NOTES

1. The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
2. ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
3. In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
4. When changing your production process, please notify ABRACON immediately.
5. ABRACON'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 is required. Please contact ABRACON for more information.
6. All specifications and Marking will be subject to change without notice.