

# 3.7 x 3.1 mm SMD CERAMIC RESONATOR

AWSZT-CV

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

**RoHS**  
Compliant



3.7 x 3.1 mm

## FEATURES:

- Low resonant impedance
- IR reflow capable
- Low cost

## APPLICATIONS:

- Remote controls, Microprocessor clocks, Mobile phones, DVD & CD-Roms, Electric appliances
- Consumer electronics

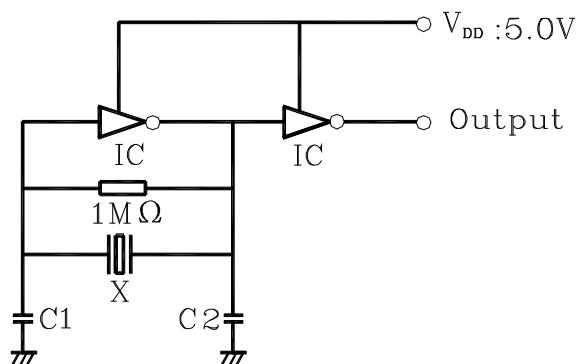
## ELECTRICAL CHARACTERISTICS:

Item	Requirement
Frequency Range	8.00MHz to 13.00MHz 16.00MHz to 50.00MHz
Resonant Impedance	See Table below
Frequency Tolerance	± 0.5%
Frequency Stability (-25°C to +85°C)	±0.4% max. (8.00MHz~13.00MHz) ±0.3% max. (16.00MHz~50.00MHz)
Withstanding Voltage	50V (DC , 1 min)
Rating Voltage	
(1) D.C. Voltage	6 V.D.C. max
(2) A.C. Voltage	15 Vp-p. max
Insulation Resistance	100MΩ min. (10V, 1min)
Operation Temperature	-25°C to +85°C
Storage Temperature	-55°C to +85°C
Aging Rate (Fosc)	±0.3% max. (from initial value)

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

Frequency range (MHz)	Resonant Impedance (Ro)(Ω) max	Load Capacitance for test circuit C1=C2 (pF)
8.00 MHz - 13.00 MHz	30 max	30
16.00 MHz - 20.00 MHz	40 max	30
20.01 MHz - 25.99 MHz	40 max	15
26.00 MHz - 50.00 MHz	40 max	5

## TEST CONDITION AND 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

C1=C2: 30pF ±20%	(8.00MHz~13.00MHz)
30pF ±20%	(16.00MHz~20.00MHz)
15pF ±20%	(20.01MHz~25.99MHz)
5pF ±20%	(26.00MHz~50.00MHz)

## OPTIONS & PART IDENTIFICATION:

AWSZT - XX.XXCV - □

**Frequency**  
Frequency in MHz

**Packaging**  
T for Tape and Reel

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## OUTLINE DRAWING:

Dimensions: mm



① INPUT ② OUTPUT

\*\* A stands for the thickness of the ceramic element, which varies with the frequency

## RECOMMENDED LAND PATTERN



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

Dimensions: mm



$\phi A$	$\phi B$	W	T	Pieces per reel	Carrier tape size
$180 \pm 3$	60min	12.4min	19.4max	1000typ.	12

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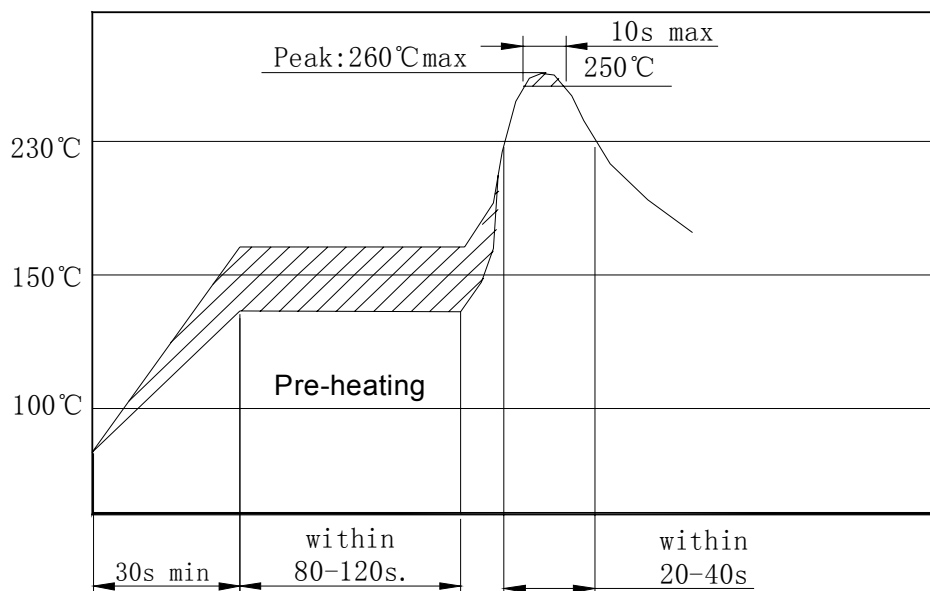
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3.7 x 3.1 mm

## 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.

ABRACON IS  
ISO9001:2008  
CERTIFIED



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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