

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, Industrial controllers
- Consumer electronics

ELECTRICAL CHARACTERISTICS:

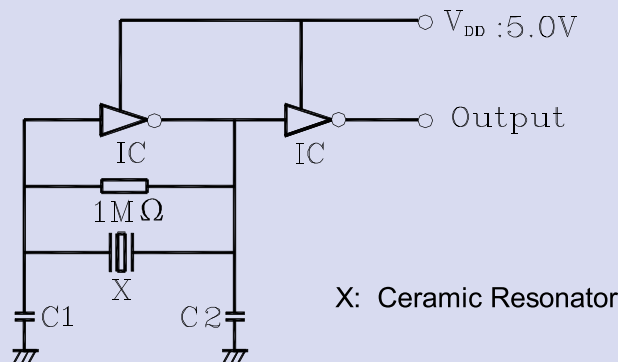
| Item | Requirement |
|-----------------------|---------------------------------|
| Frequency Range | 8.00MHz to 50.00MHz |
| Resonant Impedance | See Table 2.1 |
| Frequency Tolerance | ± 0.5% |
| Frequency Stability | ±0.3% max. (-25°C to +85°C) * |
| Withstanding Voltage | 50V (DC , 1 min) |
| Rating Voltage | |
| (1) D.C. Voltage | 6 V.D.C. max |
| (2) A.C. Voltage | 15 Vp-p. max |
| Load Capacitance | See Table 2.1 |
| 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.

Table 2.1

| Frequency Range (MHz) | Resonant Impedance (Ro)(Ω) max | Standard Load Capacitance C1=C2 (pF) |
|-----------------------|--------------------------------|--------------------------------------|
| 8.00 MHz - 13.00 MHz | 30 max | 30 |
| 13.01 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

OPTIONS & PART IDENTIFICATION:

AWSZT - XX.XXCV - □

Frequency
Frequency in MHz

Packaging
T for Tape and Reel

3.7 x 3.1 mm SMD CERAMIC RESONATOR



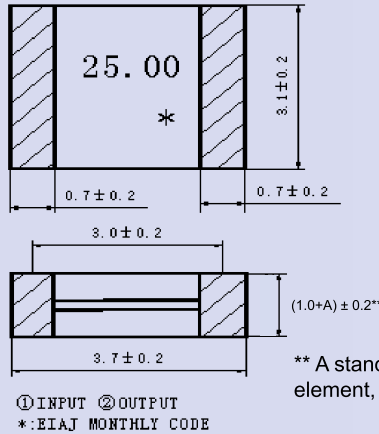
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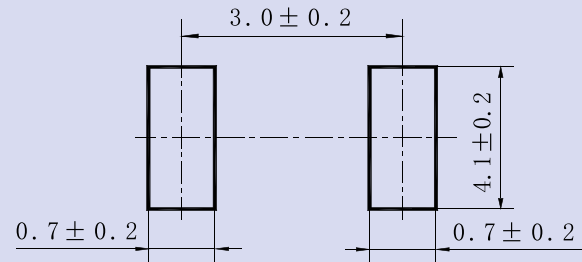
3.7 x 3.1 mm

OUTLINE DRAWING:



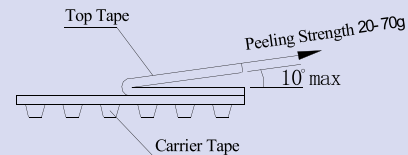
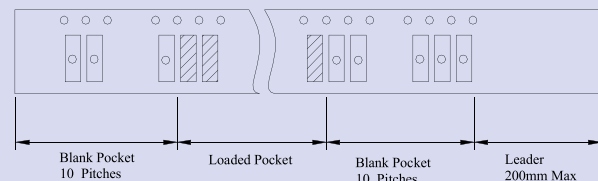
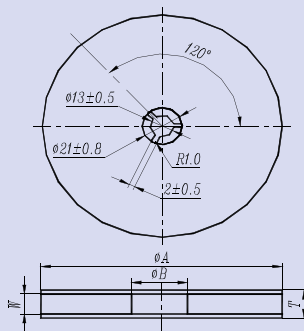
** A stands for the thickness of the ceramic element, which varies with the frequency

RECOMMENDED LAND PATTERN



Dimensions: 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 |

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.