



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date: Dec 11 2001

Product Name: HC49US 36MHz Crystal Resonator

TST Parts No.: TZ0148A

Customer Parts No.: \_\_\_\_\_

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Yian Chen

Approval by: \_\_\_\_\_ T.F. Yang

Date: \_\_\_\_\_ Dec 11 2001



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## HC-49/US Crystal Resonator

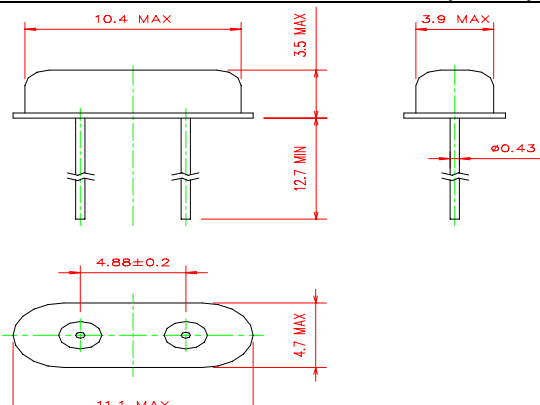
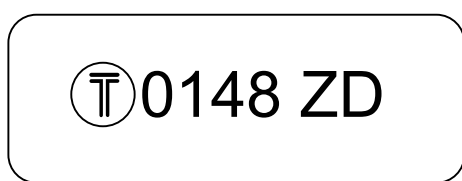
MODEL NO.: TZ0148A

REV. NO.: 1

RoHS Compliant  
Lead free  
Lead-free soldering

### Electrical Specifications:

|                                                | Specification                     |
|------------------------------------------------|-----------------------------------|
| Nominal Frequency                              | 36.0 MHz                          |
| Mode of Vibration                              | 3 <sup>rd</sup> Overtone          |
| Storage Temperature Range                      | -50°C to +125°C                   |
| Operating Temperature Range                    | -10°C to +60°C                    |
| Frequency Stability over Operating Temperature | +/-30 ppm                         |
| Frequency Make Tolerance                       | +/-30 ppm @ 25°C +/- 3°C          |
| Resonance Resistance(R)                        | 80 Ω max.                         |
| Shunt Capacitance (Co)                         | 7 pF max                          |
| Drive Level                                    | 100 uW nominal                    |
| Load Capacitance-CL                            | 18.0 pF                           |
| Aging                                          | +/-3.0 ppm/year @25°C             |
| Marking                                        | Inerasable marking (Laser or Ink) |
| Insulation Resistance                          | 500M Ω min at DC 100V             |

| Mechanical Dimensions (mm):                                                         | Marking:                                                                                                              |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  | <div><p>“D” is datecode</p></div> |