CPE23S-3.9A1R:

Description

Challenge Piezo Element 23mm diameter, Stainless steel disc – 3.9 KHz resonant frequency, type A1(=without feedback, supper thin disc), RoHS compliant.

RoHS compliant

Reliable Solid State Piezoelectric Technology

Picture

Specification

Resonant Frequency: 3900±500Hz
Resonant Impedance: 500 Max. ohm
Capacitance at 100Hz: 15,000±30% pF at 100Hz 25 °C
Input Voltage: 30V Max.
Insulated Resistance: 100M ohm Min.
Operating Temperature: -20 °C to +70 °C
Storage Temperature: -30 °C to +80 °C

Termination Description

Case: No
Diaphragm: Stainless Steel Disc 304 0.6g

Weight (Typical)

Test Point

Reliability

*High Temperature
No function at +80+/-2°C for 240 hours; function at +70+/-2°C for 240 hours

*Low Temperature
No function at -30+/-2°C for 240 hours; function at -20+/-2°C for 240 hours

*Humidity
+40+/-2°C, 95+/-5%RH, 240 hours

*Thermal Shock
-20+/-2°C 0.5 hr → +25+/-2°C 0.25 hr → +70+/-2°C 0.5 hr → +25+/-2°C 0.25 hr. Temperature Go up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles

*Vibration
1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours

*Shock
980m/s² (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each

*Drop Test
Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions – upper and side of the part are applied

*Soldering Heat Resistance
Soldering Temperature: 200 °C for 3 seconds

Warranty

For a period of one (1) year from date of manufacture under normal operations

*All specifications must be satisfied after the test (Recovery:2 to 4 hrs of recovery under the standard condition after the removal from test chamber).

Dimensions (Unit:mm)

All specifications are subject to change without notice
## Revisions History

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Description</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP.1.11.070-A0</td>
<td>Original, CPE22S-3.9A1R</td>
<td>David Z</td>
<td>2014-07-07</td>
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</tbody>
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