

CPE23S-3.9A1R:

Version: SP1.11.070-A0

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

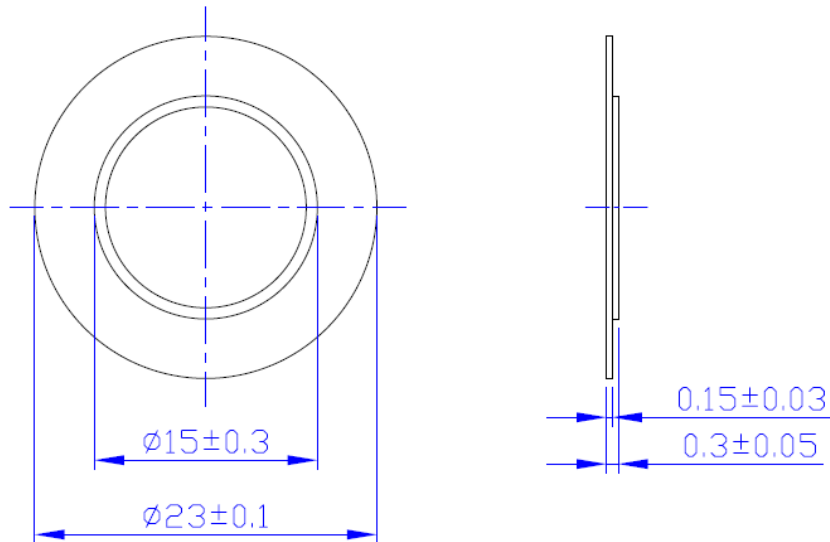


Specification

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	No
Construction Materials	Case	No
	Diaphragm	Stainless Steel Disc 304
Weight (Typical)		0.6g
Test Point		Within 1mm from edge of silver coat
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/s ² (=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

Composed by: David Z/140707 Checked by: James Z, Johnny Z/140707 Approved by: William W /140707



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Revisions History

Version Number	Description	Name	Date
SP:1.11.070-A0	Original, CPE23S-3.9A1R	David Z	2014-07-07

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