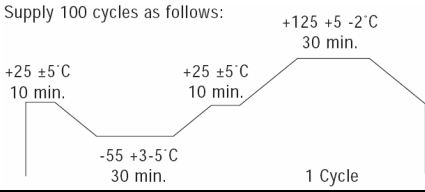


RELIABILITY TEST PROCEDURES FOR ECS-HC-49USX



<u>NO.</u>	<u>TEST NAME</u>	<u>TEST PROCEDURES</u>	<u>REQUIREMENTS</u>
1	SHOCK	Drop 3 times from the height of 100cm onto hard wooden board.	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
2	VIBRATION	Vibration Frequency: 10 to 55Hz, 1.5mm, full wave Cycle: 2 min. Direction: X.Y.Z. Time: 2 hours in each direction	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
3	STORAGE IN HIGH TEMPERATURE	+85 ±2°C for 500 hours.	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
4	STORAGE IN LOW TEMPERATURE	-40 ±2°C for 500 hours.	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
5	HUMIDITY	+ 60 ± 2°C in humidity 95% for 500 hours.	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
6	THERMAL SHOCK	Supply 500 cycles as follows: Temperature shift shall be done within 30 sec. -55 ±2°C +125 ±2°C (30 min) <-----> (30 min)	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
7	TEMPERATURE CYCLE	Supply 100 cycles as follows: 	Frequency Drift ±5 PPM Max. Resistance Drift ±15% Max.
8	STRENGTH OF TERMINALS/LEAD WIRES	1) Lead Pull: Weight: 1 Kg Time: 30 sec.	There are no visual abnormalities.
		2) Lead Bend: Weight: 225 g Bending Angle: 90 degrees Bending Count: 2 times	There are no visual abnormalities.
9	SEALING TIGHTNESS MIL-STD 202F METHOD 112D TEST C AND D	1) Dipping in Florinert at: +125 ±5°C for 5 min. (Gross Leak)	There are no visual abnormalities.
		2) Leak rate shall be measured by using: Helium leak Detector (Fine Leak)	There are no visual abnormalities.
10	Mean Time Between Failures (MTBF)	$MTBF (25^{\circ}C) = \frac{E_a \times (1/T1-1/T2) / K}{\pi}$	16396600 Hours