



## AEC-Q200 Reliability Test Report of Quartz Crystal XT324 Series-YIC

No.	Stress	Reference	Test Conditions	Sample Size	Result
1	Before Prepare Electrical Test	User Spec.	User Spec.	All	PASS
2	High Temperature Storage Test	MIL-STD-202 Method 108	1000 hours at 125°C.	77	PASS
3	Temperature Cycling Storage Test	JESD22 Method JA-104	1000 cycles (-55°C to 125°C)	77	PASS
4	High Temperature and Humidity Operating Test	MIL-STD 202 Method 103	1000 hours at 85°C/85%RH.	77	PASS
5	High Temperature Operating Test	MIL-STD-202 Method 108	1000 hours at 125°C. Rated VDD applied with 1mW and inverter in parallel, 2X crystal CL capacitors between each crystal leg and GND.	77	PASS
6	External Visual	MIL-STD-883 Method 2009	Inspect device construction, marking and workmanship. Electrical Test not required.	All	PASS
7	Physical Dimensions	JESD22 Method JB-100	Verify physical dimensions to the applicable device detail specification.	30	PASS
8	Shock Test	MIL-STD-202 Method 213	1500G, 0.5ms, half sine shocks in 6 major directions	30	PASS
9	Vibration Test	MIL-STD-202 Method 204	5g's for 20 minutes 12 cycles each of 3 orientations. Test from 10-2000 Hz.	30	PASS
10	Resistance to Soldering Heat	MIL-STD-202 Method 210	B: Solder dip - Simulates hot solder dipping (tinning) of leaded components.	30	PASS
11	Solder Ability Test	J-STD-002	SMD: c) Method D category 3 @ 260°C.	15	PASS
12	Electrical Characterization	JESD22 Method JB-100	summary to show Min, Max, Mean and Standard deviation at room as well as Min and Max operating temperatures.	30	PASS
13	Board Flex Test	AEC Q200-005	Apply a force which will bend the board ( D ) x = 2 mm minimum. 60 sec minimum holding time.	30	PASS
14	Terminal Strength (SMD)	AEC Q200-006	Apply a 17.7 N (1.8 Kg) force. 60 sec minimum holding time.	30	PASS