



DIT Reliability test list

No	Item	Parameter	Reference Standard	Phase	Sample size	Remark
1	Temperature cycle test	1.Low temp: $-40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 2.High temp: $+105^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 3.Dwell time: each for 1hr 4.Transfer time: 1.5hrs 5. Cycle times : 50 times total 300hrs 6. Cycle mode: see attached Pic. 7. Status : running	IEC68-2-14	R&D / MP	6PCS	<p>The graph shows a temperature cycle starting at 25°C, dropping to -40°C, dwelling for 1.5 hours, rising to 105°C, dwelling for 1 hour, and then repeating. The dwell period is labeled as 25±0.2(°C)/1.5hr.</p>
2	Humidity test	1.Temp : $+65^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 2.Humidity : $95\pm 2\% \text{RH}$ 3.Dwell time : 144 hrs 4.Status : non-running	IEC68-2-38	R&D/ MP	6PCS	
3	Thermal shock test	1.Low temp : $-40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 2.High temp : $+105^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 3. Dwell time: each for 0.5hr 4. Transfer: within 30s 5. Cycle mode: see attached Pic. 6. Cycle times : 100 times total 100hrs 7.Status : non-running	IEC68-2-14	R&D/ MP	6PCS	<p>The graph shows a square wave between -40°C and 105°C. The dwell time at each temperature is 0.5 hours. The x-axis is labeled TIME(min.) with markers at 0, 30, and 60. A double-headed arrow indicates '1 cycle' between 0 and 30 minutes.</p>
4	High temperature test	1.High temp : $+105^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 2.Dwell time : 168 Hrs 3.Status : running	IEC 68-2-2	R&D/ MP	6PCS	
5	Low temperature test	1.Low temp : $-40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 2.Dwell time : 48 Hrs 3.Status : running	IEC 68-2-1	R&D / MP	6PCS	
6	Mechanical vibration test	1.Vibration setup(refer to attached Pic): 1).Pulse shape: sine pulse form 2).Range of frequency : 10Hz~200Hz(logarithm sweep) 3).Sweep cycle : 300s 4).Direction : axial, radial directions 5).Vibration time : 8 hrs /each 6).Acceleration : 6 g 2.Status : running	IEC 68-2-6	R&D / MP	6PCS	<p>The graph shows a sine wave on a logarithmic scale. The y-axis is labeled 'x10⁸' and 'g' with a value of 300. The x-axis is labeled 't(s)' with values from 0 to 300 in increments of 20.</p>
7	Mechanical shocking test	1.Height : 1.2 m 2.Direction : axial,radial directions 3.Status : non-running	1.IEC 68-2-62 2.ISO 1413	R&D/ MP	6PCS	
8	Life test	1.Time: 1000hrs 2. T= $105^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 3.Status: Running	GB2689.1~2689.4-81	R&D/ MP	6PCS	