2006/09/25

Qualification Report

J-LEAD VCXO/PXO (HFF-X38 USED)

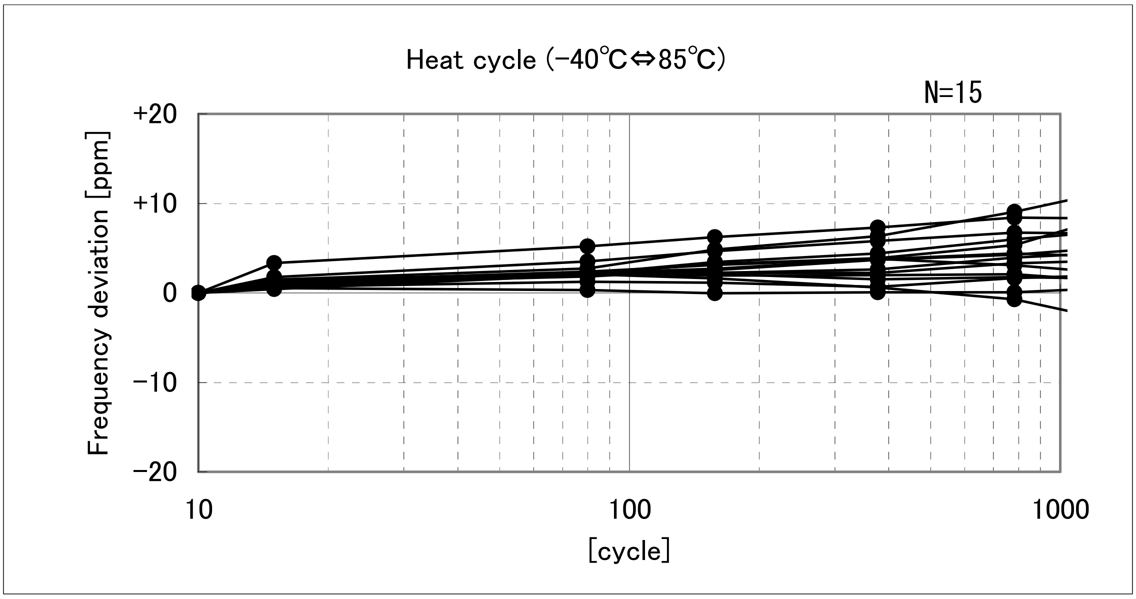
(TCO-2000,3000 Series)

1. Heat cycle test
2. Operating life test
3. High temperature and humidity test
4. Humidty test
5. Low temperature test
6. Drop test
7. Vibration test
8. ESD test
9. Solder heat resistance ,reflow
10. Solder heat resistance ,solder iron
11. Solderability
12. Mechanical shock test

EPSON TOYOCOM CORPRATION		
APP.	CHK'D	DRAW
Y.AOYAGI		K.MORITA

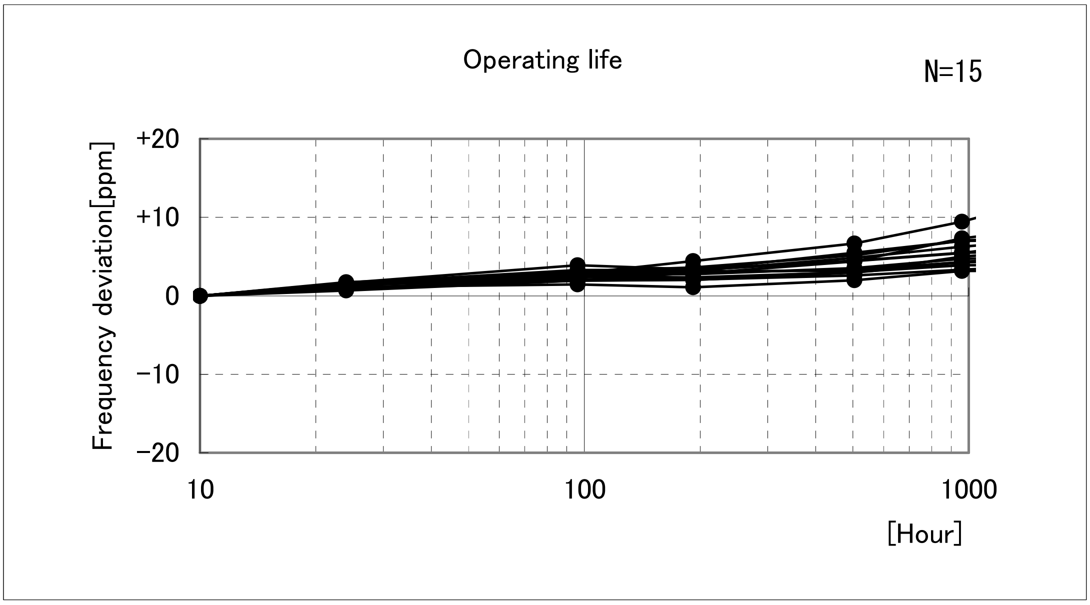
1.Heat cycle test

-40[℃]⇔+85[℃] (each 30min. 1cycle) 1000cycles



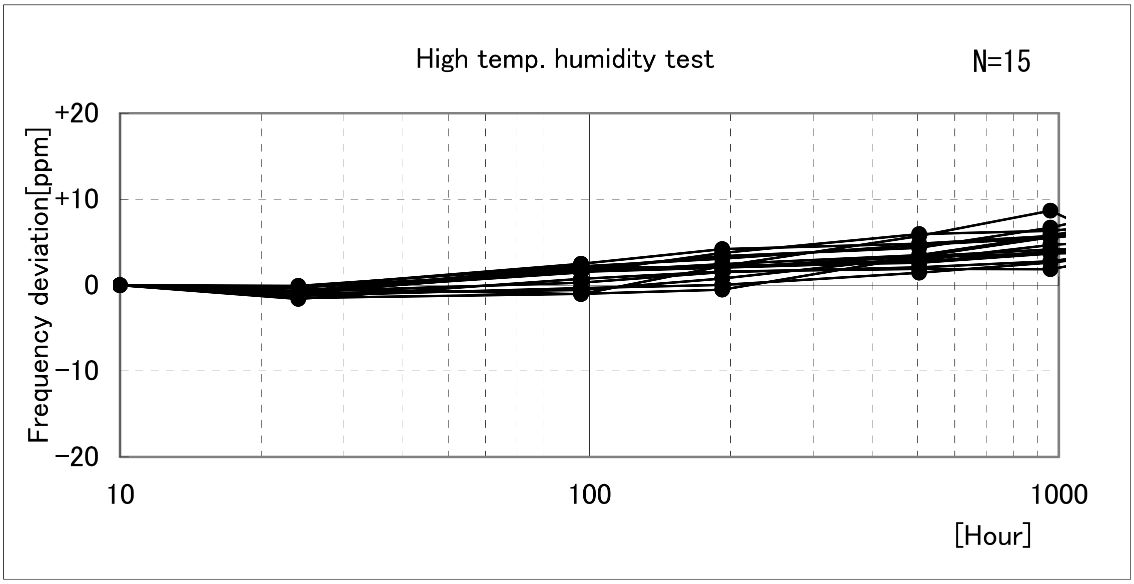
2.Operating life test

+85[℃],Supply voltage +3.63[V] 1000H



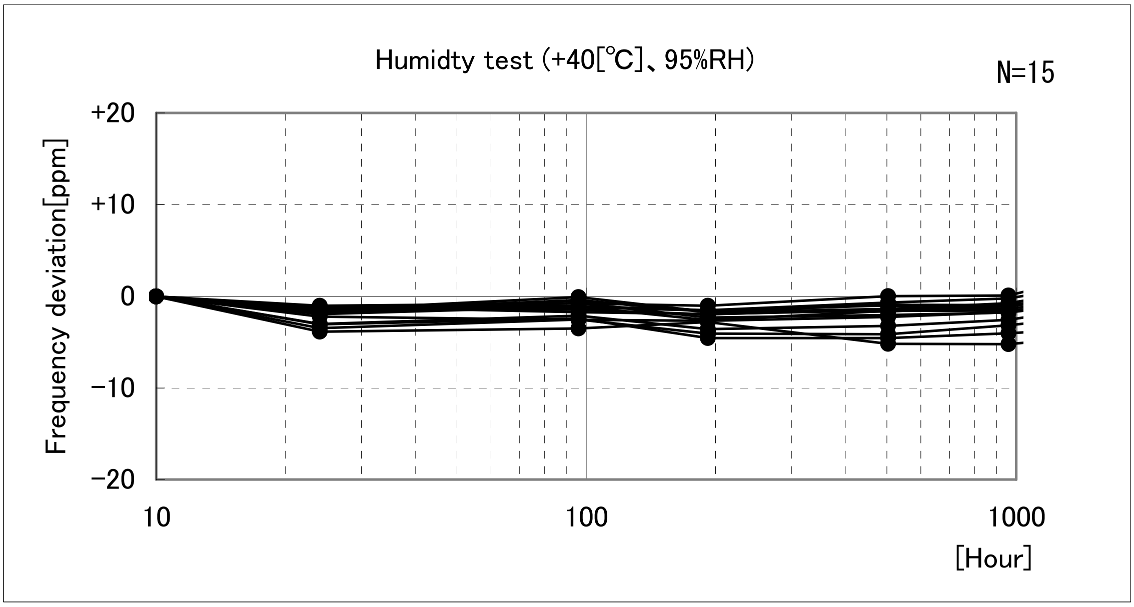
3.High temperature and humidity test

+85[℃],85%RH,Suplly voltage +3.63[V] 1000H



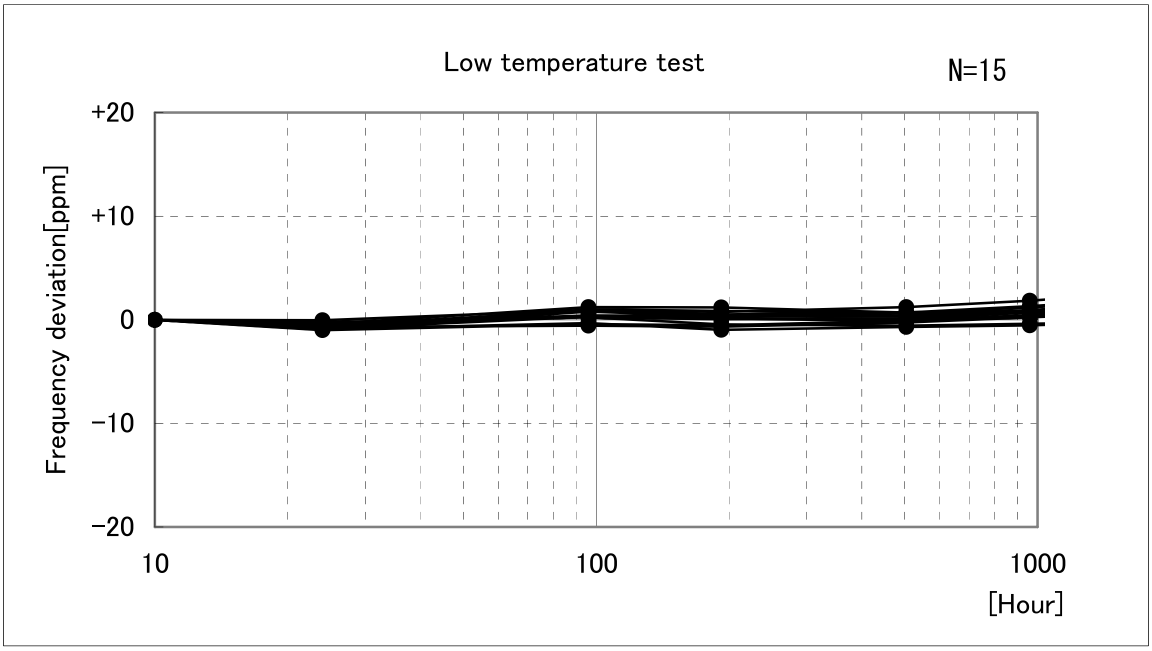
4. Humidity test

+40[℃]、95%RH 1000H



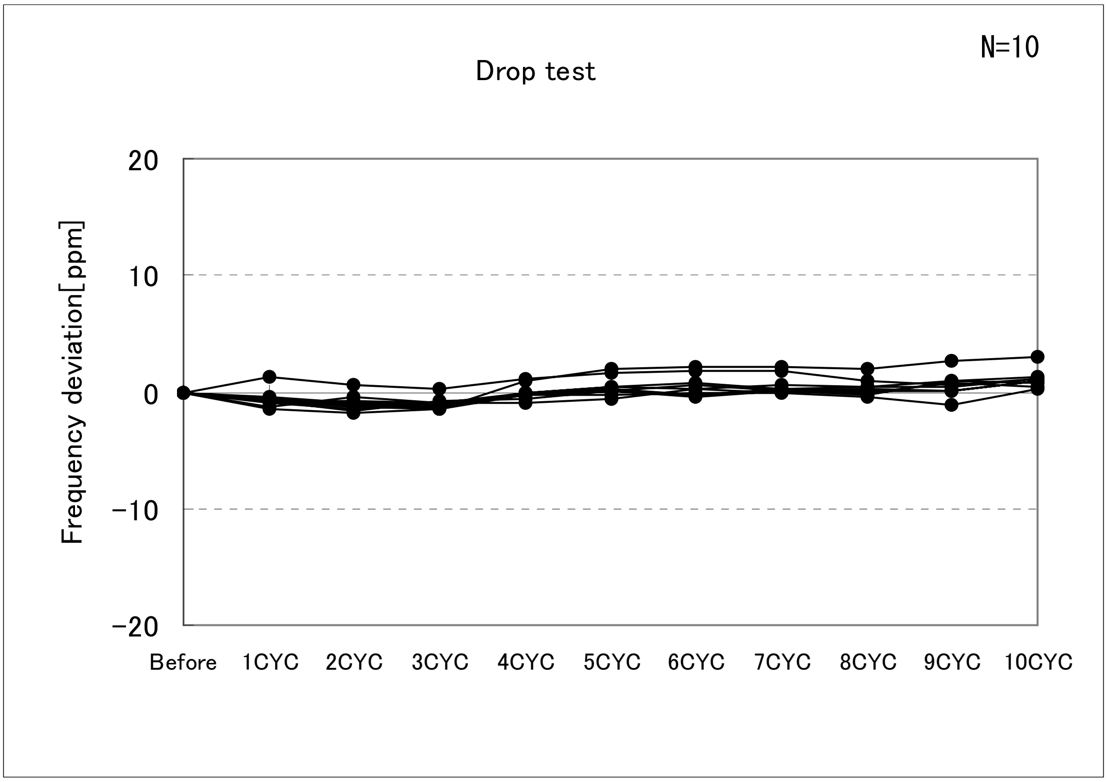
5.Low temperature test

-40[℃],1000H



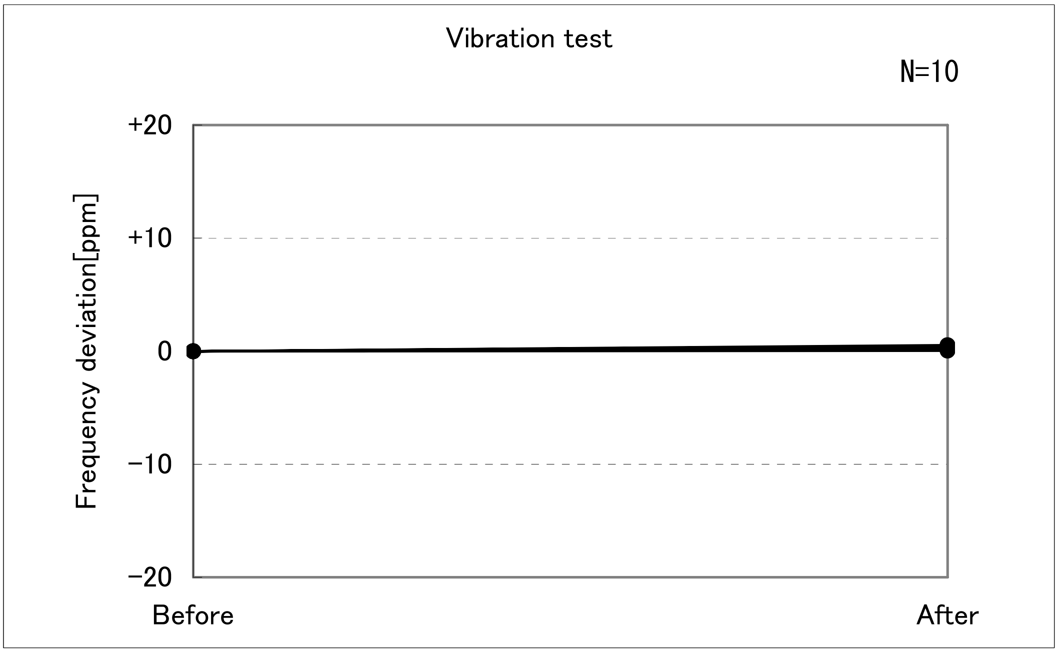
6.Drop test

On to wood plate from 750mm height
1cycle=3 directions, 10cycles



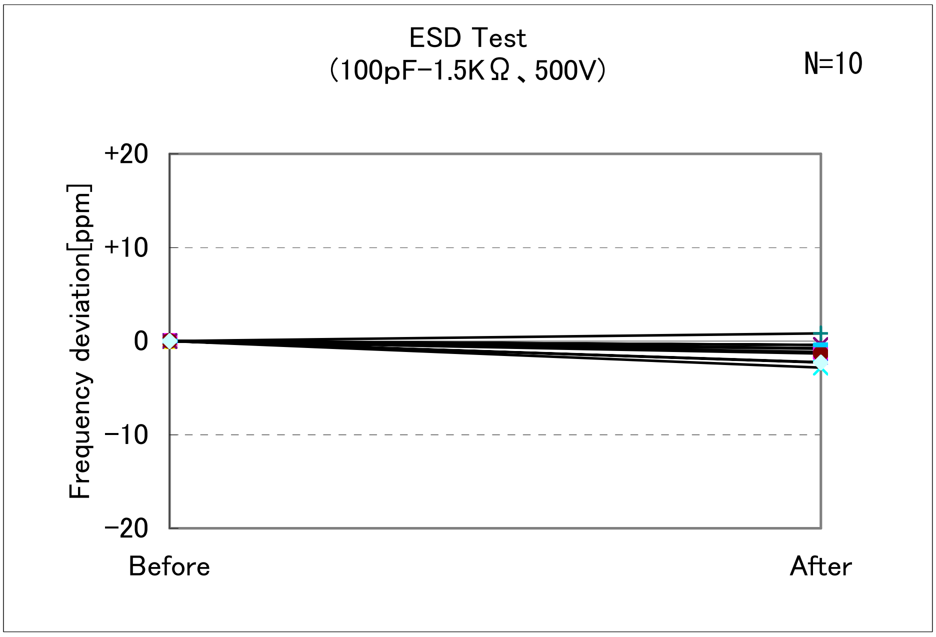
7.Vibration test

10 to 85[Hz] 1.5[mm] amplitude and 85 to 2000[Hz] 20[G]
Vibrate in 3 mutually perpendicular planes each 2hours

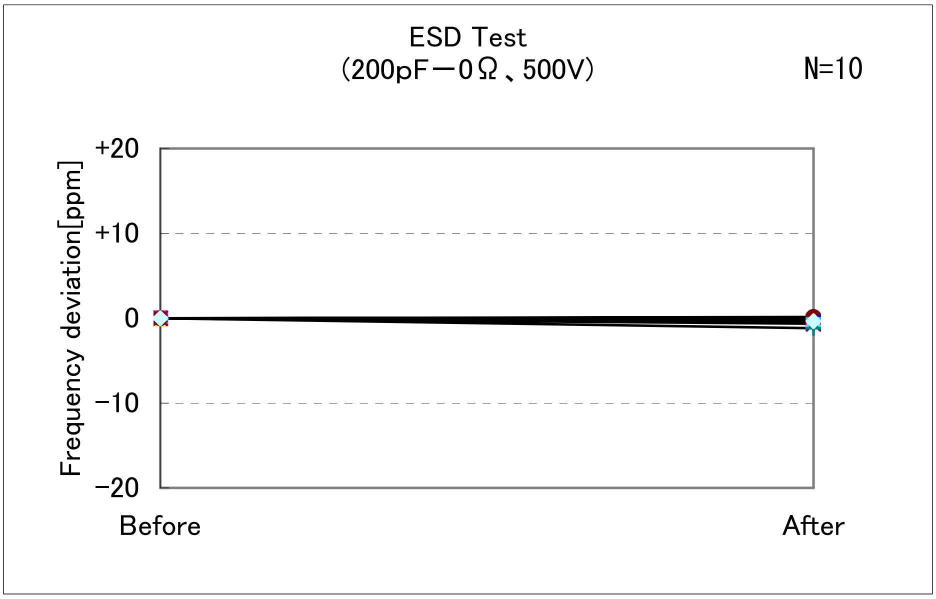


8.ESD test

Human Model：100pF-1.5KΩ,500V,3Times/pin

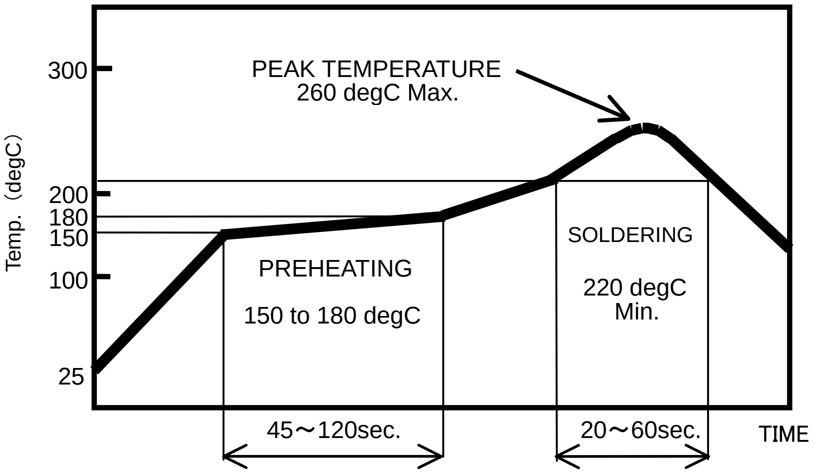


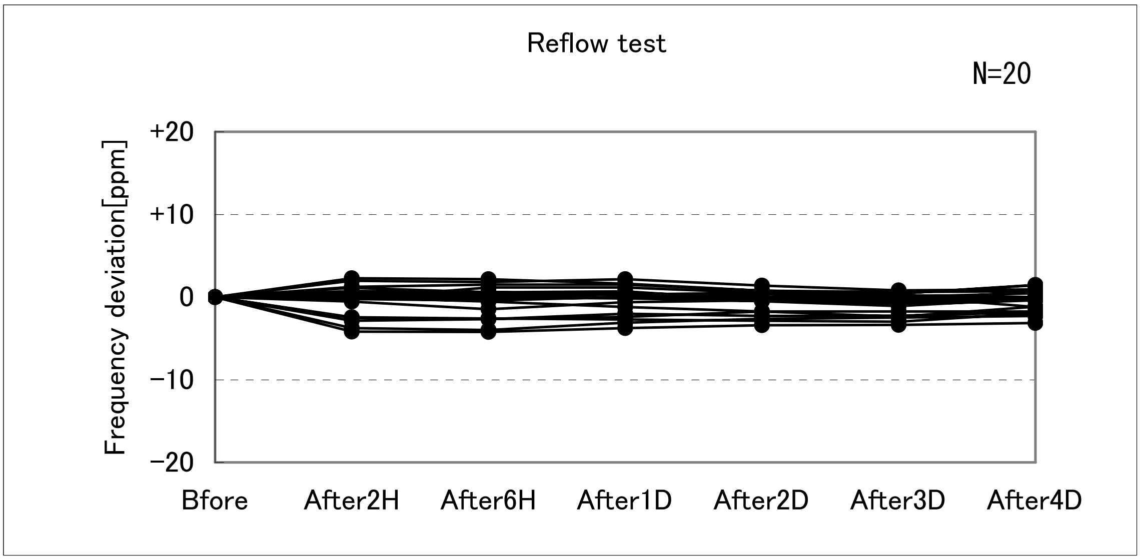
Machine Model：200pF-0Ω,500V,3times/pin



9.Solder heat resistance ,reflow

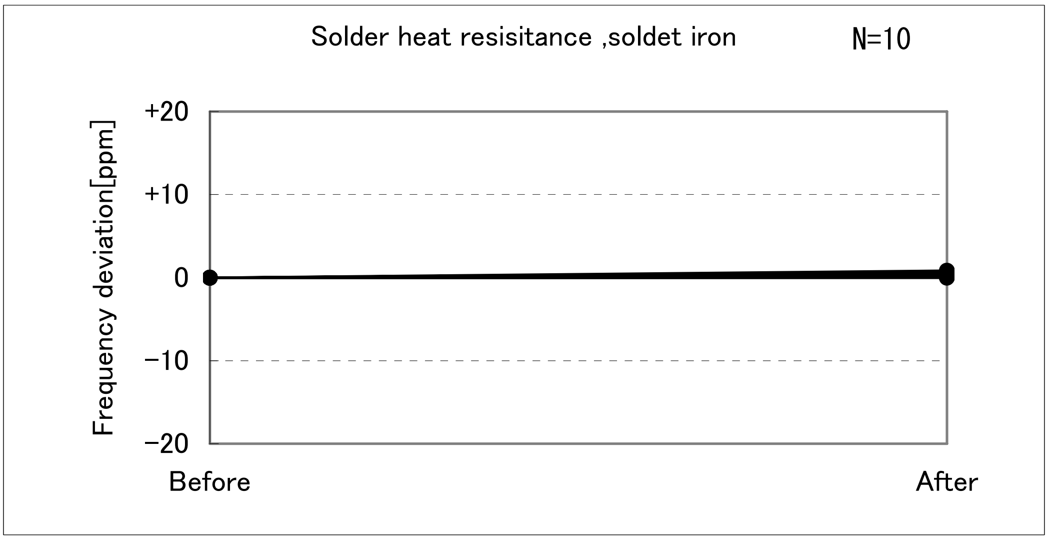
2times below relow soldering profile.





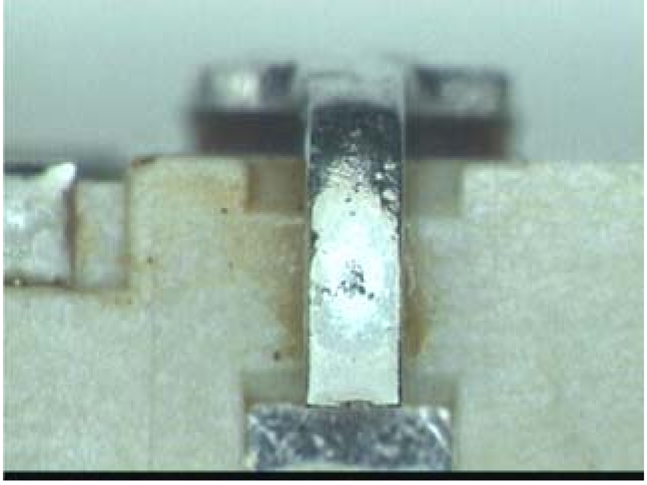
10.Solder heat resistance ,solder iron

350℃、5second/pin×6pin　 Measure 1 hour after test



11.Solderability

235℃、3second (Pb Free solder)



12. Mechanical shock test

3000[G]、5000[G]　1minute 3times/direction×6directions