Reliability Performance & Critique

Qualification Test of Alternate Die Source for Chipled (PCN : V13-004-48475413-0A)

Item	Test Type	Condition	SS	Test criteria	Test Result
1	Room temperature operating life test (RTOL)	25'C,5mA (ET @ 20mA)	100	a) No catastrophic failure and no parametric failure b) Max Iv degradation < 50% c) Vf shift < 5%	Passed 500hrs
2	High humidity high temperature operating life test (WHTOL)	60'C,90%RH, 18mA (ET @ 20mA)	100		Passed 500hrs
3	Low temperature operating life test (LTOL)	-40'C, 20mA (ET @ 20mA)	100		Passed 500hrs
4	Temperature cycle (TMCL)	-40/85'C, 15|5|15 (ET @ 20mA)	100		Passed 100 cycles
5	Temperature cycle (TMCL)	-40/85'C, 15|5|15 (Hot Light up test @ 100'C)	300	No open/short LEDs	Passed 100 cycles