JSCJ

Mean Time To Failure Report

Report NO.: M-F00140

Part Number: CJP4R9SN10MS

Package Type: TO-220-3L-CB

1.Reliability Test Method And Description:

Stress Test Item:	HTRB
Test Duration (Hours):	1000
Sample Q'ty (Pcs):	77
Failure Q'ty (Pcs):	0
Total Device Hours (Hrs):	77000
Accelerated Temp. (Ta)(°C):	150
Normal Operation Temp. (Tu)(°C):	55
Eactivation Energy (Ea):	0.7
K (Boltzmans Constant):	8.617164E-5 eV/°K
Chi-Square Constant @confidence level:60% (chi):	1.833
Chi-Square Constant @confidence level:90% (chi):	4.605

Acceleration Factor ,Af at Tu list:

Tu	55℃	85℃	100℃	125℃	150℃
Af	259.2	32.6	13.1	3.3	1.0

2.Results(Use Conditions Tu=55℃ & confidence level:90%):

Failure Rate FIT (@Operation Condition):	115.4	FIT
Mean Time to Failure (MTTF):	8668504	Hours
	990	Years

3.MTTF/FIT Calculate Equations:

Af	exp[(Ea/K)*(1/(Tu+273.15)-1/(Ta+273.15))]
FIT @ Operation Condition	Chi*10^9/(2*Hrs*Af)
MTTF Hours	10^9/FIT
MTTF Years	10^9/(FIT*24*365)

Remark: JSCJ Laboratory reserves the right of final interpretation of this report