



**Reliability Report
(Q2016-017)**

**CPC9909N Product Qualification
High Efficiency, Off-Line. High Brightness LED
Driver**

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Summary

The CPC9909N product has successfully passed IXYS ICD's requirements for product qualification.

Table 1: Device Information

Product Number	CPC9909N
Package Type	8 Pin SOIC
Assembly Site	Greatek Taiwan
Test Site	IXYS ICD BEV, Beverly, MA, USA

Table 2: Reliability Test Result

Stress Test	Stress Conditions	Applicable Specs	Product/Package	Sample Size (SS)	# of Failures
HTFB	125°C, 80% WVDC, 1000 hrs	Mil-Std-883 M1005 JESD22-A-108	CPC9909N G00481	80	0
Thermal Shock	0 to 100°C, 10/10 dwells, 15 cycles	Mil-Std-883, M1011	CPC9909N G00481	55	0
Temperature Cycle	-55 to 125°C, 10/10 dwells, 300 cycles	Mil-Std-883, M1010, "B"	CPC9909N G00481	55	0
Hot Storage	125C, 1000 hrs	JESD22-A103-C	CPC9909N G00481	45	0
MSL	IR Reflow, Level 1	J-STD-020D.1	CPC9909N G00481	25	0

Table 3: FIT Rate Summary

Qual Lot #	Stress Test	# of Devices	# of Fail	Hours Tested	Equivalent Dev. Hours	FIT Rate @ 60% CL
1	HTFB	80	0	1000	20,432,477	45.03*

* HTFB FIT Rate was calculated based on the Acceleration Factor (AF) and equivalent device hours at 0.7eV of activation energy at 125°C test temperature and 40°C use temperature.

Approvals

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