



**Reliability Report  
(Q2017-010)**

**IX9915N Product Qualification  
Low Voltage Error Amplifier with a High  
Voltage Darlington Transistor**

**May 19, 2017**

**IXYS Integrated Circuits Division  
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**Summary**

The IX9915N product have successfully passed IXYS ICD's requirements for product qualification.

**Table 1: Device Information**

Product Number	IX9915N
Package Type	8LSOIC
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
HAST	130C, 85%, 18. psi, 96hrs	JESD22-A110-C	IX9915N GE0078	77	0
Thermal Shock	Mil-Std-883, M1011	0 to 100°C, 10/10 dwells, 15 cycles	IX9915N GE0078	55	0
Temperature Cycle	-55 to 125°C, 10/10 dwells, 300 cycles	Mil-Std-883, M1010, "B"	IX9915N GE0078	55	0
Hot Storage	125C, 1000 hrs	JESD22-A103-C	IX9915N GE0078	50	0
MSL	IR Reflow, Level 1	J-STD-020D.1	IX9915N GE0078	25	0

**Table 3: ESD Results – 8-Pin SOIC**

Stress Test	Stress Conditions	Applicable Specs	Product/ Package	Highest Passed	Class
HBM	All Pins, 1.5kΩ, 100pF	JS-001-2012	IX9915N GE0078	+/-2000V	2

**Table 4: FIT Rate Summary**

Qual Lot #	Stress Test	# of Devices	# of Fail	Hours Tested	Equivalent Dev. Hours	FIT Rate @ 60% CL
1	HAST	77	0	96	10,583,759	86.93

\* HAST FIT Rate was calculated based on the Acceleration Factor (AF) and equivalent device hours at 0.7eV activation energy for 130°C test temperature and 40°C use temperature.

### Approvals

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