



**Reliability Report
(Q2017-014)**

**PLA134 Product Reliability Test
Single-Pole, Normally Open
OptoMOS Relay**

July 26, 2017

IXYS Integrated Circuits Division
78 Cherry Hill Drive, Beverly, MA 01915
www.ixysic.com

Summary

The PLA134 product has successfully passed IXYS ICD's requirements for product reliability test.

Table 1: Device Information

Product Number	PLA134
Package Type	6 Pin DIP
Assembly Site	Atec, Laguna, Philippines
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
HTRB	125°C, 80% WVDC, 1000 hrs	Mil-Std-883 M1005 JESD22-A-108	PLA134 T71518	105	0
Thermal Shock	0 to 100°C, 10/10 dwells, 15 cycles	Mil-Std-883, M1011	PLA134 T71518	55	0
Temperature Cycle	-55 to 125°C, 10/10 dwells, 300 cycles	Mil-Std-883, M1010, "B"	PLA134 T71518	55	0
Hot Storage	125C, 1000 hrs	JESD22-A103-C	PLA134 T71518	45	0
MSL	IR Reflow, Level 1	J-STD-020D.1	PLA134 T71518	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	HTRB	105	0	1000	26,817,626	34.31*

* HTRB 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

Prepared by: Martha W. Brandt* 7/26/17
Martha W. Brandt Date
Senior Quality Engineer

Approved by: George Belezos* 7/27/17
George Belezos Date
Quality Manager

Approved by: James Archibald* 7/27/17
James Archibald Date
VP Research and Development

*Signature on File