



# PRODUCT CHANGE NOTIFICATION

Pre-Notification       Final Notification

**PCN Number:**

PCN20140617A

**Micropac Part Number / Description:**

5962-93140 (53111)

**Description of Change:**

Electrical Specifications       Physical Dimensions       Test Method       Other

Internal circuit change providing faster switching (turn-on and turn-off) time under most conditions (TA = 25C; current design Ton = 1.3mSec, new design Ton = 0.9mSec, versus specification of Ton < 6mSec; current design Toff = 36uSec, new design Toff = 12uSec, versus specification of Toff < 250uSec). See attached data summary. No changes to dimensions, form, fit or function. No changes to the specification.

**Reason For Change:**

To improve electrical switching performance and manufacturing yield.

**Change Effectivity:**

4Q2014

**Qualification Plan & Results:**

Characterization testing complete. MIL-PRF-38534, Class H qualification scheduled for 3Q2014.

**Micropac Contact:**

(972)272-3571

Cecil Miller, Micropac QA Director

**PCN Date:**

17 June 2014

RunMode	Production
DeviceNumber	53111-03
LotNumber	
BuildNumber	
TestType	Final
TestTime	Jul thru Dec 2013

TestTemp	25	53111 Historical	Avg	Units
TestName				
Input Reverse Breakdown Voltage		-15.9839		Vol
Input Forward Voltage		1.3122		Vol
Output Withstanding Voltage CH1		117.4446		Vol
Output Leakage Current CH1		0.0657		uAmp
Output Withstanding Voltage CH2		117.0090		Vol
Output Leakage Current CH2		0.0715		uAmp
RDSon ConnA		0.4025		Ohm
Turn On Time ConnA		1.2798		mSec
Turn Off Time ConnA		35.8		uSec

53111 New	Avg	Units
	-14.9798	Vol
	1.3131	Vol
	118.3115	Vol
	0.0703	uAmp
	117.8668	Vol
	0.0779	uAmp
	0.3874	Ohm
	0.8822	mSec
	12.2	uSec

TestTemp	-55	53111 Historical	Avg	Units
TestName				
Input Reverse Breakdown Voltage		-14.7724		Vol
Input Forward Voltage		1.4825		Vol
Output Withstanding Voltage CH1		113.8610		Vol
Output Leakage Current CH1		0.1648		uAmp
Output Withstanding Voltage CH2		113.1975		Vol
Output Leakage Current CH2		0.2715		uAmp
RDSon ConnA		0.2426		Ohm
Turn On Time ConnA		1.2942		mSec
Turn Off Time ConnA		47.2		uSec

53111 New	Avg	Units
	-13.8671	Vol
	1.4375	Vol
	111.7228	Vol
	0.0702	uAmp
	111.3739	Vol
	0.0781	uAmp
	0.2346	Ohm
	0.6772	mSec
	7.9	uSec

TestTemp	125	53111 Historical	Avg	Units
TestName				
Input Reverse Breakdown Voltage		-16.4153		Vol
Input Forward Voltage		1.1536		Vol
Output Withstanding Voltage CH1		117.8787		Vol
Output Leakage Current CH1		0.4458		uAmp
Output Withstanding Voltage CH2		117.3776		Vol
Output Leakage Current CH2		0.4840		uAmp
RDSon ConnA		0.6823		Ohm
Turn On Time ConnA		1.5055		mSec
Turn Off Time ConnA		18.4		uSec

53111 New	Avg	Units
	-16.0326	Vol
	1.1893	Vol
	118.2118	Vol
	0.3568	uAmp
	117.7776	Vol
	0.3677	uAmp
	0.6370	Ohm
	1.7080	mSec
	44.0	uSec