1. TITLE
IRHLG77110, Datasheet Status Update

2. DOCUMENT NUMBER
FV5-C-16-0012

3. DATE
January 20, 2016

4. MANUFACTURER AND ADDRESS
International Rectifier
205 Crawford Street
Leominster, MA 01453

5. MANUFACTURER PART NUMBER
See below for IR Part Number

6. BASE PART
NA

7. NATIONAL STOCK NUMBER (NSN)
NA

8. CAGE
69210

9. EFFECTIVE DATE
January 20, 2016

10. GOVERNMENT NUMBER
NA

11. POINT OF CONTACT
Manufacturer’s Representative or
Customer Service Representative (978) 534-5776

12. DRAWING NUMBER
NA

13. SPECIFICATION NUMBER
MIL-PRF-19500

14. PRODUCT CHANGE
This GIDEP PCN is to announce changes in datasheet parameters from Preliminary to Release status for the following International Rectifier Part No

**IRHLG77110 (2N7612M1)**
100V 100kRad Hi-Rel Quad N-Channel TID Hardened MOSFET in a MO-036AB package

**Electrical Characteristics @ Tj = 25°C**

- **RDS(on)** Static Drain-to-Source On-State Resistance
  - Change maximum limit from 0.22 to 0.285 Ω
- **gfs** Forward Transconductance
  - Change test condition from VDS = 10V to VDS = 15V
- **Qg** Total Gate Charge
  - Change from 15nC to 11nC
- **Qgs** Gate-to-Source Charge
  - Change from 2.5nC to 4nC
- **td(on)** Turn-On Delay Time
  - Change Spec Limit from 15 to 20ns
- **tr** Rise Time
  - Change Spec Limit from 20 to 35ns
- **tf** Fall Time
  - Change Spec Limit from 25 to 20ns

**Table 1. Electrical Characteristics @ Tj = 25°C, Post Total Dose Irradiation (Per Die)**

- **RDS(on)** Static Drain-to-Source On-State Resistance
  - Change test package from TO-39 to TO-3 type
  - Change maximum limit from 0.25 to 0.214 Ω
- **RDS(on)** Static Drain-to-Source On-State Resistance (MO-036AB)
  - Change maximum limit from 0.22 to 0.285 Ω
- Replace Table 2 and the SEE graph with Table 2 and the SEE graph in (PD-97062B) for IRHLF77110
- Replace SOA curve - Fig 13. Maximum Safe Operating Area, including DC curve – see chart attached herein.

**Datasheet Footnotes:**

#2 - Change VDD from 25V to 50V and change L from 6.6mH to 60mH

Reference: IR Datasheet PD-97178

16. APPROVING GOVERNMENT ACTIVITY

17. GIDEP REPRESENTATIVE
Paul Hebert

18. SIGNATURE

19. DATE
January 20, 2016
New SOA curve - Fig 13. Maximum Safe Operating Area