

DATE: 7 December, 2016

PCN #: 2250

PCN Title: Change of Assembly Materials, Assembly Process and Mechanical Specification

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request within 30 days as well. Otherwise, samples may not be built prior to this change. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



PRODUCT CHANGE NOTICE

PCN-2250 REV 00

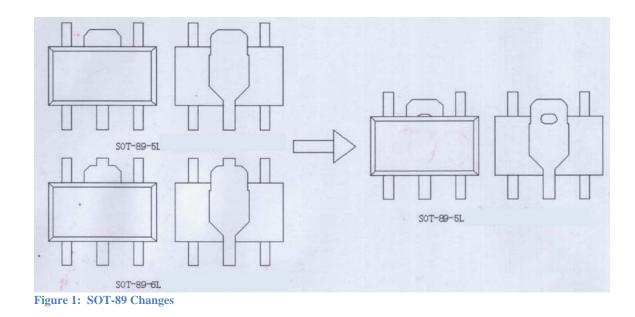
| Notification Date: | Implementation Date: | Product Family: | Change Type: | PCN #: | | |
|---|---|--|--|-----------------------|--|--|
| 7 December, 2016 | 7 March, 2017 | Analog | Assembly Materials/Process, and Mechanical Specification | 2250 | | |
| | | TITLE | | | | |
| Chang | e of Assembly Materials/ | Process, and Mechanical | Specifications for Various | Parts | | |
| | | DESCRIPTION OF CHANGE | | | | |
| identified below on se ensure that no chang | This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes has qualified the changes identified below on selected Analog devices. Full electrical characterization and reliability testing have been completed to ensure that no changes in product reliability, device functionality or data sheet electrical specifications exist. There will be no change to the Function of affected products. | | | | | |
| | | IMPACT | | | | |
| There will be n types. | o change in product perf | ormance, but the form an | d fit will have changes fo | r various package | | |
| | | PRODUCTS AFFECTED | | | | |
| MC80E & MC89C - Marking method will change from Ink to Laser Marking, see Table 1. A(G)PR34330CMPTR-G1 Lead frame change, see Table 2 Lead frame change from SOP8/PP(5R)-A(Existing L/F) to SOP8/PP(5R)-E(New L/F) Drain (Pin5) connection change from three wire (Existing L/F) to Lead (New L/F) SOT89-5 Lead frame will change from GND (SOT-89-5L/6L) to SOT-89-5L see Table 3 and <i>Figure 1</i> POD change for package SO-16, A2 (typical) is changed from 1.45 mm to 1.05 mm, see Table 4 and <i>Figure 2</i> POD change for package QFN3030, A is changed from 0.55 mm to 0.6 mm, and the Pin1 indicator shape has changed, see Table 5 and <i>Figure 3</i>. POD change for package QFN4040-16, A is changed from 0.75 mm to 0.6 mm, see Table 6 and <i>Figure 4</i> POD change for package QFN4040-20, A is changed from 0.75 mm to 0.6 mm, see Table 7 and <i>Figure 5</i> POD change for package QFN5050, A is changed from 0.75 mm to 0.6 mm, see Table 8 and <i>Figure 5</i> | | | | | | |
| | | WEB LINKS | | | | |
| Manufacturer's Noti | ce: http://ww | vw.diodes.com/pcns | | | | |
| For More Informatio | n Contact: <u>http://ww</u> | w.diodes.com/contacts.html | | | | |
| Data Sheet: | http://wv | vw.diodes.com/catalog | | | | |
| | | DISCLAIMER | | | | |
| | orporated Sales represent ed in this announcement a | ative is contacted in writing re considered approved. | g within 30 days of the pos | sting of this notice, | | |



| Table 1 - Marking method will change from Ink to Laser Marking | | | | | |
|--|-------|--|--|--|--|
| MC80E | MC89C | | | | |
| MC80E | MC89C | | | | |

| Table 2 - Leadframe Changes | | | | | |
|-----------------------------|------------------|--|--|--|--|
| APR34330CMPTR-G1 | GPR34330CMPTR-G1 | | | | |

| | Table 3 - Leadframe Changes to SOT-89; See Figure 1 | | | | | | |
|--------------|---|-------------------|-------------------|-------------------|-------------------|--|--|
| AH9281RTR-G1 | AP2112R5-1.2TRG1 | AP2112R5-3.3TRG1 | AP2112R5A-2.6TRG1 | AP2115R5-2.5TRG1 | AP2115R5A-2.5TRG1 | | |
| AH9281RTR-G1 | AP2112R5-1.8TRG1 | AP2112R5A-1.2TRG1 | AP2112R5A-3.3TRG1 | AP2115R5-3.3TRG1 | AP2115R5A-3.3TRG1 | | |
| AH9282RTR-G1 | AP2112R5-2.5TRG1 | AP2112R5A-1.8TRG1 | AP2115R5-1.2TRG1 | AP2115R5A-1.2TRG1 | | | |
| AH9282RTR-G1 | AP2112R5-2.6TRG1 | AP2112R5A-2.5TRG1 | AP2115R5-1.8TRG1 | AP2115R5A-1.8TRG1 | | | |





| Table 4 - POD Changes to SO-16; See Figure 2 | | | | | |
|--|-------------|-----------|----------------------|-----------|-----------|
| PAM8403DR | PAM8403DR-H | PAM8003DR | PAM8004DR | PAM8008DR | PAM8406DR |
| | | | H L Detail 'A' | auge Pl | · |
| | | From | То | | |
| | A2(mm) Nom | 1.45 | | | |
| | A2(mm) Min | 1.35 | 1.02 | | |

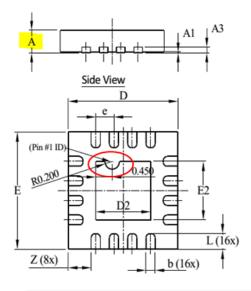
1.55

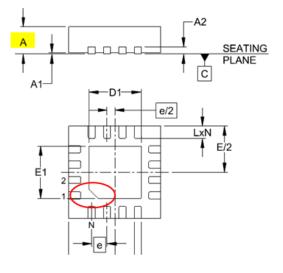
Figure 2: SO-16 Changes

A2(mm) Max



| Table 5 - POD Changes to QFN3030; See Figure 3 | | | | | |
|--|--|--|--|--|--|
| PAM8908JER | | | | | |

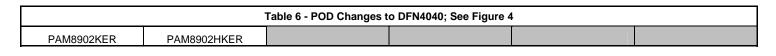


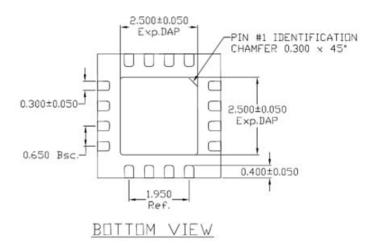


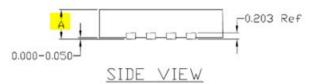
| | From | То |
|-----------|------|--------------------|
| Pin #1 ID | | \bigtriangledown |
| A(mm) Nom | 0.5 | 0.6 |
| A(mm) Min | 0.4 | 0.55 |
| A(mm) Max | 0.6 | 0.65 |

Figure 3: QFN3030 Changes







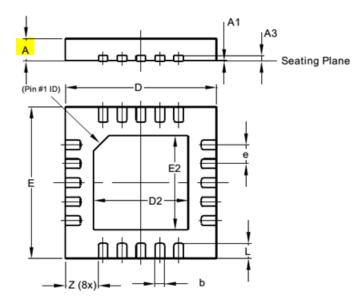


| | From | То |
|-----------|------|------|
| A(mm) Nom | 0.75 | 0.6 |
| A(mm) Min | 0.7 | 0.55 |
| A(mm) Max | 0.8 | 0.65 |

| Figure 4: | QFN4040-16 | Changes |
|-----------|------------|---------|
|-----------|------------|---------|



| Table 7 - POD Changes to QFN4040; See Figure 5 | | | | | |
|--|--|--|--|--|--|
| PAM8404KGR | | | | | |

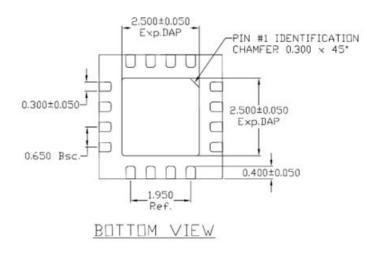


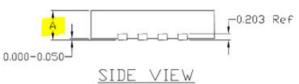
| | From | То |
|-----------|------|------|
| A(mm) Nom | 0.75 | 0.6 |
| A(mm) Min | 0.7 | 0.55 |
| A(mm) Max | 0.8 | 0.65 |

Figure 5: QFN4040-20 Changes



| Table 8 - POD Changes to QFN5050; See Figure 6 | | | | | |
|--|-----------|--|--|--|--|
| PAM8006ATR | PAM8620TR | | | | |





| | From | То |
|-----------|------|------|
| A(mm) Nom | 0.75 | 0.6 |
| A(mm) Min | 0.7 | 0.55 |
| A(mm) Max | 0.8 | 0.65 |

| Figure | 6: | QFN5050 | Changes |
|--------|----|---------|---------|
|--------|----|---------|---------|