



# PRODUCT / PROCESS CHANGE NOTIFICATION

Preliminary Report

Final Report

Notification Date: 12/10/05

Projected Completion Date: 10/1/2006

PCN Number : 10093

**Product Identification (Including Customer P/N):**

MHR / M3R series molded plastic "J" leaded oscillators.

**Detailed Description of Changes:**

All units in the MHR and M3R series will now have the crystal leads soldered with very high melting temperature solder, either Sn10 / Pb88 / Ag02, Sn8 / Pb90 / Ag02, or equivalent.

**Reason for Changes:**

The solders that will be used have a high enough melting point (268 °C minimum) to go through a solder reflow profile at 260 °C max. Note: there is a RoHS exemption for solders with more than 85% lead, because there is no alternative, non-leaded solder that has a high enough melting point to go through a 260 °C reflow soldering profile without melting.

**Projected Timing of Change and Implementation Date:**

October 01, 2006. It is projected that all units with date codes after 0640, will be made with the very high melting point solders described above.

**Anticipated Impact on Quality and Reliability:**

It is expected that the change to very high temperature solder will improve the reliability of the parts, in that they will now able to survive 260 °C (10 seconds max.) reflow soldering profiles.

**Qualification Plan (if applicable):**

The qualification testing consisted of units being subjected to drop shock, vibration, thermal cycling, and simulated reflow profile with peak temperature of 260 °C for 10 s.

**Last Time Buy Date:**

N/A

**Last Time Delivery Date and Comments (if applicable):**

N/A

<b>Originated By:</b>	_____ Robert Miner _____	<b>Date:</b>	6/27/2006
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<b>MtronPTI Apps. Eng'r.:</b>	_____ Bill Jannewein _____	<b>Date:</b>	6/27/2006
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<b>MtronPTI Operations:</b>	_____ Greg Anderson _____	<b>Date:</b>	6/27/2006
<b>MtronPTI Quality Assurance:</b>	_____ JKocak _____	<b>Date:</b>	6/27/2006

**CUSTOMER ACKNOWLEDGMENT:**

This PCN will be considered acceptable and become effective on the date shown if no feedback is received within 30 days of notification denoted above.

**PCN APPROVED:**

Signature: \_\_\_\_\_

YES: [ ] NO: [ ]

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS:**

*Please return this signed document to:*

MtronPTI, 100 Douglas Ave., Yankton, SD, 57078 or email to [pcn@mtronpti.com](mailto:pcn@mtronpti.com)