PRODUCT / PROCESS CHANGE NOTIFICATION

Notification Date: 12/13/10 **Projected Completion Date: 12/13/10** **PCN Number : 10215**

Product Identification (Including Customer P/N):
MtronPTI Catalog Part Families M1, M2, M3, and MM 5x7 mm HCMOS clock oscillators; and custom part numbers that are based on these oscillator families.

Detailed Description of Changes:
These parts may now be made with packages that have notches with electrical contacts at the ends of the packages. These contacts do not extend all the way to the bottom of the package, and they should not be connected to anything on the customer's board. The packages with the contacts are widely used in the crystal oscillator industry.

Reason for Changes:
The external contacts allow testing of the crystal element in the package after seal, and this provides an additional check on the crystal resistance before shipment.

Projected Timing of Change and Implementation Date:
The changes will be made on a running basis. Eventually, we plan to use only 5x7 mm packages with the external crystal contacts.

Anticipated Impact on Quality and Reliability:
Quality and reliability are expected to be improved as the crystal element can be checked for resistance after the oscillator unit is sealed.

Qualification Plan (if applicable):
Qualification testing was done on an 80 MHz 5x7 mm oscillator, and MtronPTI can provide mechanical / environmental data upon request.

Last Time Buy Date:
Not Applicable

Last Time Delivery Date and Comments (if applicable):
Not Applicable

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MtronPTI Operations:	Janelle Munkvold	**Date:** 12/6/2010
MtronPTI Quality Assurance:	JKocak	**Date:** 12/1/2010

NOTE: All MtronPTI signatures are required.

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