

Title: PCN	<b>Mercury</b> <b>www.mercury-crystal.com</b>	Revision: 0
PCN No.: 9-01		Date: Oct. 10, 2009
Category: (VC)TCXOs		Page 1 of 2

### Product Change Notification

Mercury wishes to notify customers that a packaging change will be made to the following product(s). Should you have any issues with the timeline or content of this change, and/or you require data or samples to qualify this change, please contact Mercury. No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones set forth in this PCN. Mercury reserves the right to ship either version manufactured after the product change effective date until the inventory on the earlier version has been depleted. To reach Mercury:

Asian, European and African customers: Please contact Mercury Electronic Industrial Co. at [sales-tw@mercury-crystal.com](mailto:sales-tw@mercury-crystal.com) or by fax at (886) (2) 2496-0769

North & South American customers: Please contact Mercury United at [sales-us@mercury-crystal.com](mailto:sales-us@mercury-crystal.com) or by fax at (1) (909) 466-0762.

#### Description and Reasons for the Change:

- Passive components are moved from the inside to the outside of the die cavity area for the reasons of
- a. External tuning circuit access for better initial frequency accuracy.
  - b. Improved manufacturability and expanded product offerings.
  - c. Product reliability enhancement
  - d. Elimination of the top epoxy encapsulation around the crystal to avoid popcorning.

#### Product(s) Affected:

M57T TCXOs and VM57T VCTCXOs

#### Manufacturing Location Affected:

Mercury Electronic Ind. Co., Ltd. – Taiwan  
Mercury United Electronics, Inc. – USA

#### Customer Impact:

No impact. No change in footprint and board area. Board re-layout is not necessary. No function change.

#### Recommended Actions:

- a. Package seat height is reduced from 2.5 mm to 2.3 mm. Offset is needed for automatic pick and place pick-up.
- b. Upon approval, change approved Mercury part number from
  - 1) M57T to M572T (for TCXO)
  - 2) VM57T to VM572T (for VCTCXO)

#### Forecasted Key Milestones:

Action	Date
Date PCN Issued	Oct. 10, 2009
Effective Date of change	
Qualification samples for current (V)M57 customers	
For new orders from new customers: Standard production utilizing (V)M572 package	
Last time buy for the (V)M57 <sup>(i)</sup>	Dec. 31, 2009
Last time shipment for the (V)M57	Feb. 1, 2010
Unless special arrangement is made, all product assembled with a date code after Feb 1, 2010 will be (V)M572	

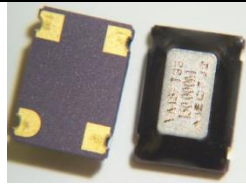
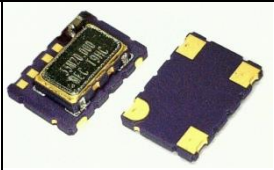
Note: <sup>(i)</sup> Delivery of either (V)M57 or (V)M572 may be shipped, until (V)M57 packages are depleted from stock.



Title: PCN	<b>Mercury</b> <b>www.mercury-crystal.com</b>	Revision: 0
PCN No.: 9-01		Date: Oct. 10, 2009
Category: (VC)TCXOs		Page 2 of 2

**Traceability Guidelines:**

The change can be identified by comparing the following:

	Current	After Change
Top line marking for TCXO: for VCTCXO	M57T VM57T	M572T VM572T
Appearance (top side)		
Date code (on 3 <sup>rd</sup> line marking)		Include and after "0B1"

**Reliability and Qualification Summary:**

Full electrical characterization has been completed on representative devices. Qualification testing has verified the product reliability enhancement. Qualification details are available upon request.

**Customer Acknowledgement of Receipt**

Approved       Not Approved

Customer			
Name		Title	
Date		Signature	
Phone		Fax	
e-mail			
Customer comments			

**PCN Revision History:**

Date of Revision	Revision Number	Reason
Oct. 10, 2009	0	Originally published PCN

