4 East Gate Road, Little Island, Co. Cork, Ireland. www.macomtech.com



Dec 22nd, 2016

Digi-Key Corporation 701 Brooks Ave South Thief River Falls, Minnesota 56701

ATTN: Quality/Purchasing Manager

Subject: Correction to error on PCN-00893 for part number MACP-009011-C80370 Lead-Free (RoHS 6of6) conversion

PCN-00963

Dear Valued Customer:

Please accept this PCN letter as formal notification for the change of M/A-COM Technology Solutions part number(s) shown below.

The device(s) listed on this page are the affected device(s).

According to our records, one or more of these devices has been purchased by your company within the past twenty-four (24) months.

M/A-COM Part Number(s):

MACP-009011-C80370

Technical details of this change notice follow on the next page(s).

Please contact me if you have any questions.

Sincerely,

Alan Miller

Product Line Manager (CATV)
M/A-COM Technology Solutions

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PCN Number: 00963 PCN Date: December 22nd, 2016

Title: Lead-free conversion of MACOM part number listed.

Change is to convert part to RoHS compliant.

This PCN addresses an error found in PCN-00893 after it had been issued. The PCB finish had changed from HASL to ENIG for MACP-009011-C80370 but was omitted in error.

The comparison data remains unchanged as it represents a HASL v ENIG finish.

The full change description is as follows:

Wire attach from HMP solder to Wire Weld, Central Wires untapped, PCB finish changes from HASL to ENIG.

Estimated Sample Availability: Proposed 1st Ship Date: 50 samples of each available March 22nd, 2017 immediately if required. **Change Type: Assembly Site** Design **Electrical Specification** Test Site Assembly Process X **Mechanical Specification** Test Process Assembly Materials X Packing/Shipping/Labeling **PCN Details Description of Change:**

MACP-009011-C80370

These parts currently use HMP solder on the wire connections. The PCB currently used is HASL. In order to make these parts fully RoHS compliant and Pb-free the HMP will be replaced with weld connections and HASL will be replaced with ENIG. The central wires will be untapped for assembly optimization purposes. The transformers will have the same fit and function with a slight modification to form.

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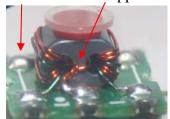


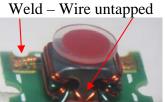


PCB HASL

PCB ENIG

Solder - Wire tapped





Reason for Change:

To comply with market request for product to be RoHS compliant and lead-free.

Products Affected:

MACP-009011-C80370

Anticipated impact on Fit, Form, Function:

Slight modification on Form. FIT and FUNCTION unaffected.

Changes to product identification resulting from this PCN:

None

Qualification: Test Results

Comparative test results – Product assembled with HMP solder and SAC305 solder in

the wire-tap connection.

See Appendix I: MACP-009011-C80370 Test Data.

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Appendix I MACP-009011-C80370 **Coupling Forward Return Loss Input** -7.2 -12 -13 -7.5 -14 -7.6 -7.8 -s12_transmission_sac305 r-16.5 - Port2_reflection_sac305 8. 0 ---- Port2_reflection_weld s12_transmission_weld -8.2 ---Low Spec -18 ----High Spec High Spec -19 -86 -20 -21 200 400 1000 200 600 800 1200 400 600 1000 1200 Frequency (MHz) Frequency (MHz) Mainline Loss Forward **Return Loss Output** -10 -1 r-20 Port3_reflection_sac305 # ·15 **⊕** -25 -s32_transmission_sac305 ---- Port3_reflection_weld ---s32_transmission_weld -35 ---- High Spec -40 -2.3 -2.5 -2.6 -45 200 400 1200 **Coupled Return Loss** Directivity -13 -14 -15 -16 Port1_reflection_sac305 Directivity_Sac-305 **⊕** -17 ---- Port1_reflection_weld Directivity_Weld Low Spec Low Spec -19 High Spec High Spec -20 -21 -22 Frequency (MHz)