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30th Oct, 2024

Richardson RFPD, Inc.  
2001 Butterfield Road, Suite 1800  
Downers Grove, Illinois 60515

ATTN: Quality/Purchasing Manager

**PCN-01791**

**Subject: Product improvement for MAPD-008957-CT0012.**

Dear Valued Customer,

Please accept this PCN letter as formal notification for the change of MACOM part number(s) shown below.

**MACOM Part Number(s):**

- **MAPD-008957-CT0012**

The details of change and the qualification data was shown in the next pages. After the change, the datasheet specifications will remain unchanged.

In accordance with MACOM Technology Solutions' customer notification policy, you are receiving this notice because you have purchased one or more of the products listed in the previous two-year period.

Please contact your local sales representative if you have any specific questions.

Sincerely,

Aidan Mulcahy  
Product Marketing Manager  
[aidan.mulcahy@macom.com](mailto:aidan.mulcahy@macom.com)

**PCN Number:** PCN-01791

**PCN Date:** 30th Oct, 2024

**Title:** Product improvement for MAPD-008957-CT0012.

**Proposed 1st Ship Date:**

Jan 30th, 2025

**Estimated Sample Availability:**

Samples are available

**Change Type:**

Assembly Site

Design X

Electrical Specification

Test Site

Assembly Process X

Mechanical Specification

Test Process

Assembly Materials X

Packing/Shipping/Labeling

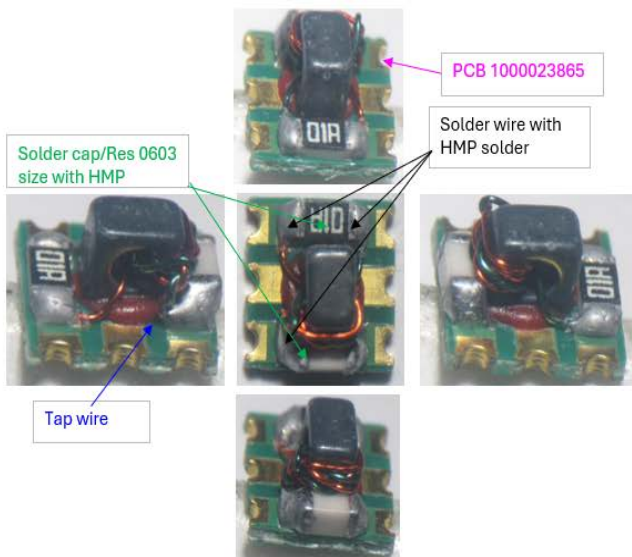
## PCN Details

### Description of Change:

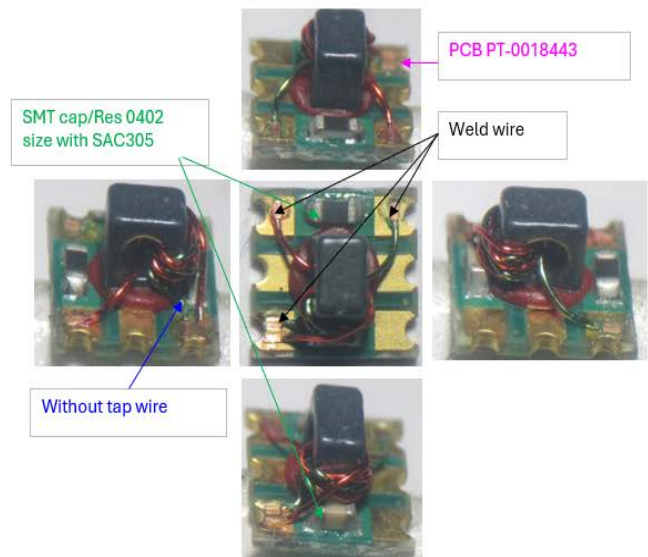
Change the BOM and the process of MAPD-008957-CT0012 at below areas:

- PCB supplier and the layout change to ensure the supply continuity.
- Solder change from HMP to SAC305 to comply with RoHS 6/6.
- Wire soldering process changed to wire welding and the tap wire was removed.
- Chip component changed from 0603 to 0402 size.

#### Existing



#### New



**Reason for Change:** Since the PCB supplier decided to EOL the PCB used on this part, MACOM introduced the second source from the current AVL list to ensure the PCB supply continuity. In parallel, MACOM improved the design and the related BOM materials to make the new part comply with RoHS 6/6. No change on the data sheet specifications.

**Products Affected:**

- MAPD-008957-CT0012

**Anticipated impact on Fit, Form, Function:**

Form, Fit and Function unaffected.

**Changes to product identification resulting from this PCN:**

None

**Qualification: Test Results**

Comparative analysis was performed on the parts. The result showed no significant shift in the electrical parameters and the dimensions between the parts with the old and new BOM.

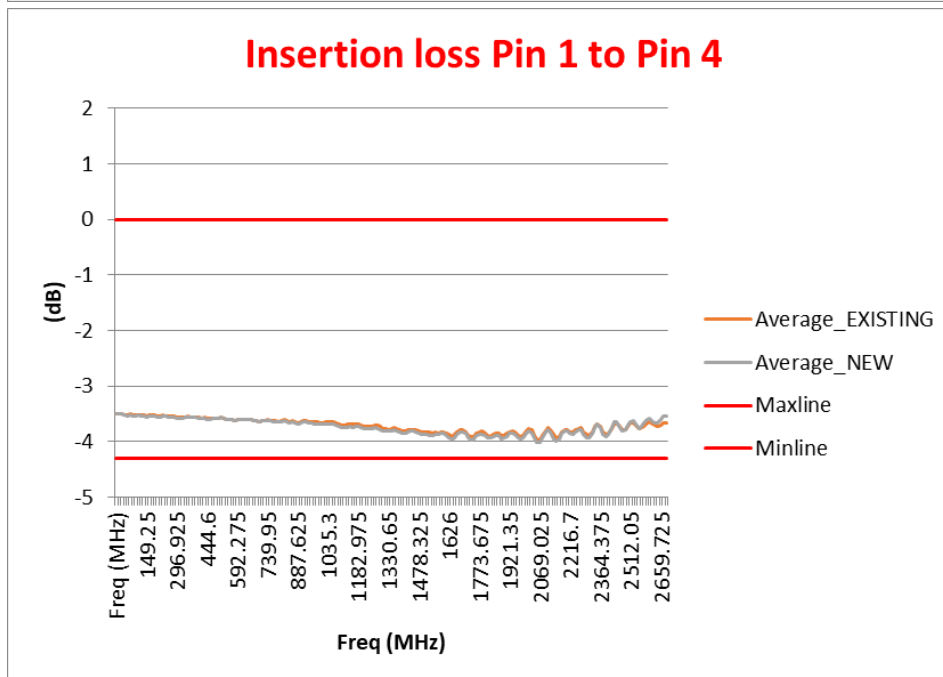
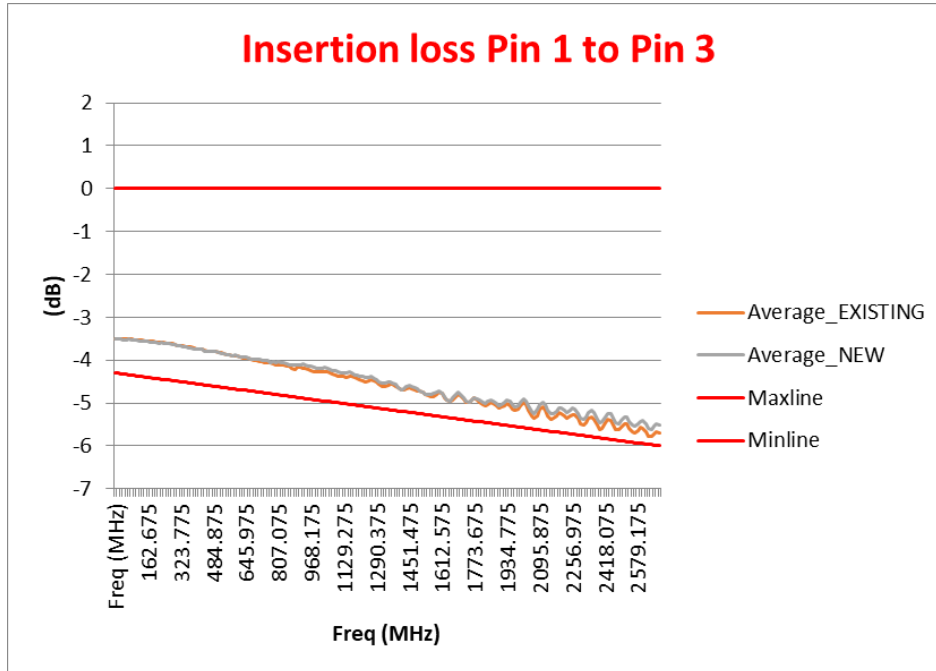
*Appendix I : MAPD-008957-CT0012 Electrical Test Comparison Data*

*Appendix II: MAPD-008957-CT0012 Demension Comparison Data*

*Appendix III: MAPD-008957-CT0012 Solder Composition comparison Data*

**Appendix I**

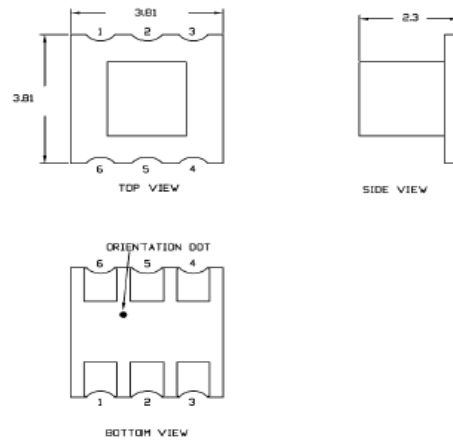
**MAPD-008957-CT0012 Electrical Test Comparison Data**



**Appendix II**

**MAPD-008957-CT0012 Demension Comparison Data**

**Outline Drawing**



Dimensions in mm.  
Tolerance:  $\pm 0.2$  mm unless otherwise noted.

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OLD BOM				
No	Spec	X	Y	Z
		(3.81 $\pm$ 0.2)mm	(3.81 $\pm$ 0.2)mm	(2.3 $\pm$ 0.2)mm
	MIN spec	3.61	3.61	2.10
	MAX spec	4.01	4.01	2.50
1		3.80	3.86	2.30
2		3.82	3.86	2.32
3		3.81	3.90	2.20
4		3.83	3.88	2.35
5		3.83	3.89	2.36
6		3.82	3.87	2.37
7		3.82	3.88	2.35
8		3.81	3.91	2.34
9		3.84	3.87	2.31
10		3.82	3.90	2.33
MIN		3.80	3.86	2.20
AVERAGE		3.82	3.88	2.32
MAX		3.84	3.91	2.37

New BOM				
No	Spec	X	Y	Z
		(3.81 $\pm$ 0.2)mm	(3.81 $\pm$ 0.2)mm	(2.3 $\pm$ 0.2)mm
	MIN spec	3.61	3.61	2.10
	MAX spec	4.01	4.01	2.50
1		3.81	3.93	2.35
2		3.81	3.91	2.32
3		3.80	3.87	2.22
4		3.80	3.87	2.35
5		3.80	3.81	2.36
6		3.79	3.84	2.34
7		3.79	3.92	2.35
8		3.81	3.85	2.31
9		3.79	3.86	2.33
10		3.80	3.90	2.32
MIN		3.79	3.81	2.22
AVERAGE		3.80	3.88	2.33
MAX		3.81	3.93	2.36

**Appendix III**

**MAPD-008957-CT0012 Solder Composition Comparison Data**

**Existing solder: HMP 362 5C**

**3. Composition / information on ingredients**

General description: Mixture  
Declaration of the ingredients according to GB 13690-2009:

Hazard component CAS-No.	Content	GHS Classification
Lead 7439-92-1	80- < 100 %	
Tin 7440-31-5	1- < 5 %	
Rosin 8050-09-7	1- < 5 %	Skin sensitizer 1 H317
Silver 7440-22-4	1- < 5 %	

**New solder: SAC305P**

**3. COMPOSITION AND INFORMATION ON INGREDIENTS**

Single Substance or Mixture Mixture  
Chemical name or General name Solder paste

**Composition**

Material name	Chemical formula	CAS No	Official file number	Content wt%
Tin	Sn	7440-31-5	-	85.4
Silver	Ag	7440-22-4	-	2.7
Copper	Cu	7440-50-8	-	0.44
Modified rosin	-	Trade secret	7-946	2.7
Modified rosin	-	Trade secret	7-937	1.8
Solvent (glycol type)	-	Trade secret	7-97	3.6
Miscellaneous	-	Trade secret	-	3.36