



130 W Cochran St, Unit B  
Simi Valley, CA 93065  
Tel:818-701-4933

## Process Change Notification (PCN)

<b>Notification number:</b>	<b>060624-1</b>
<b>Notification date:</b>	<b>06 Jun 2024</b>
<b>Proposed implementation date:</b>	<b>06 Sep 2024</b> (90 days notification before change, according to JEDEC standard)
<b>Product type affected:</b>	Please refer to table 1 in Appendix 1.
<b>Change Category</b>	Additional 2nd wafer source.
<b>Change Classification</b>	Major
<b>Change description:</b>	Add 2nd wafer source for product MBRBL40120CT-TP & MBRL60100CT-BP. Full electrical characterization and high reliability testing has been completed to ensure there is no change to device functionality or electrical specifications in the datasheet.
<b>Reason for change:</b>	To increase production flexibility and capacity.
<b>Deposition of old product</b>	NA
<b>Identification of Changed product:</b>	DC 2436 onwards
<b>Contact person:</b>	Please contact your respective Account manager (AM) / Inside sales representative (ISR/CSR) if you have further query.
<b>Approved by:</b>	Jason Gao (Director of Engineering) Steve Zhang (Director of Supply Chain ) Seaman Wu (Director of Quality) Pamela Cheng (General Manager)

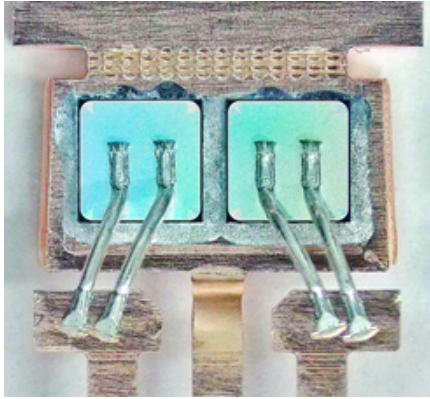
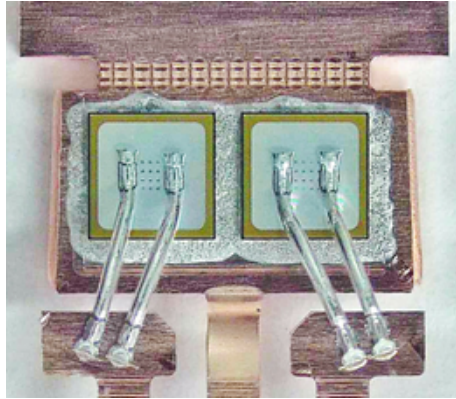
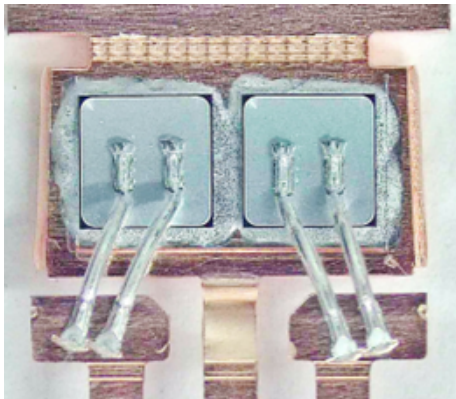
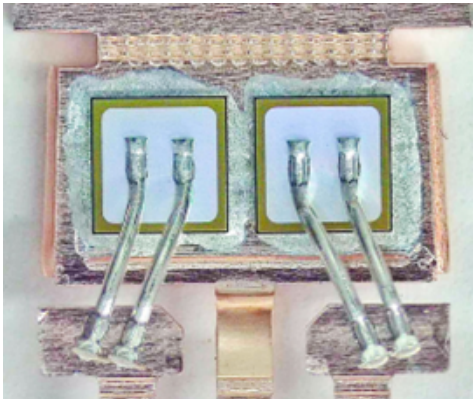


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## Appendix 1: Table 1

Product type affected	
MBRBL40120CT-TP	MBRL60100CT-BP

### Change description

Change description	Original source	New source
MBRBL40120CT-TP		
MBRL60100CT-BP		



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## Reliability test report:

# Reliability Report

Part Number: **MBRBL40120CT-TP**

Test Results : **PASS**

Test Item	Conditions	Duration	Quantity	Rejects
<b>TEST</b> Pre- and Post-Stress Electrical Test	$T_a = 25\text{ }^{\circ}\text{C}$	N/A	all parts	see below
<b>Pre-conditioning</b>	JESD22A-113 1. Temperature Cycling: $-40\text{ }^{\circ}\text{C} \sim 60\text{ }^{\circ}\text{C}$ , 2. Bake: $125\text{ }^{\circ}\text{C}$ , 3.1 Moisture Soak: $85\text{ }^{\circ}\text{C}$ , 85%RH for MSL1; 3.2 Moisture Soak: $30\text{ }^{\circ}\text{C}$ , 60%RH for MSL3; 4. Reflow*3Cycles: $260\text{ }^{\circ}\text{C}$	5Cycles; 24 hours; 168hours 192hours 3Cycles	308Pcs	0
<b>HTRB</b> High Temperature Reverse Bias	MIL-STD-750 Method 1038 $T_j = T_{jmax}$ , 80% VR	1000 hours	77Pcs	0
<b>TC</b> Temperature Cycling	JESD22-A104 $-55\text{ }^{\circ}\text{C} (+0, -10)/15\text{Min} \sim$ $150(+15, -0)/15\text{Min}$ ,	1000Cycles (500hours)	77Pcs	0
<b>AC</b> Autoclave	JESD22-A102 $T_a = 121\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ , RH = 100 %, 15psig	96 hours	77Pcs	0
<b>H3TRB</b> High Humidity High Temperature Reverse Bias	JESD22-A101 $T_a = 85\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ , RH = 85% $\pm$ 5%, 80 % VR (VR MAX=100V)	1000 hours	77Pcs	0
<b>IOL</b> Intermittent Operating Life	MIL-STD-750 Method 1037 ON 2Min/OFF 2min, devices powered to insure $\Delta T_j \geq 100\text{ }^{\circ}\text{C}$	15000 cycles (1000 hours)	77Pcs	0
<b>RSH</b> Resistance to Solder Heat	JESD22-B106 $260\text{ }^{\circ}\text{C} (+5, -0)$	10 s	30Pcs	0
<b>SD</b> Solderability	J-STD-002 $235\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$	3 s	10Pcs	0
<b>HTSL</b> High Temperature Storage Life	JESD22-A103 $T_{stgMax}$	1000 hours	77Pcs	0



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## Reliability test report:

# Reliability Report

Part Number: MBRL60100CT-BP

Test Results : **PASS**

Test Item	Conditions	Duration	Quantity	Rejects
<b>TEST</b> Pre- and Post-Stress Electrical Test	T <sub>a</sub> = 25 °C	N/A	all parts	see below
<b>Pre-conditioning</b>	JESD22A-113 1. Temperature Cycling: -40 °C ~ 60 °C, 2. Bake: 125 °C, 3.1 Moisture Soak: 85 °C, 85% RH for MSL1; 3.2 Moisture Soak: 30 °C, 60% RH for MSL3; 4. Reflow*3Cycles: 260 °C	5Cycles; 24 hours; 168hours 192hours 3Cycles	308Pcs	0
<b>HTRB</b> High Temperature Reverse Bias	MIL-STD-750 Method 1038 T <sub>j</sub> = T <sub>jmax</sub> , 80% VR	1000 hours	77Pcs	0
<b>TC</b> Temperature Cycling	JESD22-A104 -55 °C (+0, -10)/15Min~ 150(+15, -0)/15Min,	1000Cycles (500hours)	77Pcs	0
<b>AC</b> Autoclave	JESD22-A102 T <sub>a</sub> = 121 °C ± 2 °C, RH = 100 %, 15psig	96 hours	77Pcs	0
<b>H3TRB</b> High Humidity High Temperature Reverse Bias	JESD22-A101 T <sub>a</sub> = 85 °C ± 2 °C, RH = 85% ± 5%, 80 % VR (VR MAX=100V)	1000 hours	77Pcs	0
<b>IOL</b> Intermittent Operating Life	MIL-STD-750 Method 1037 ON 2Min/OFF 2min, devices powered to insure ,ΔT <sub>j</sub> ≥ 100 °C	15000 cycles (1000 hours)	77Pcs	0
<b>RSH</b> Resistance to Solder Heat	JESD22-B106 260 °C (+5, -0)	10 s	30Pcs	0
<b>SD</b> Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
<b>HTSL</b> High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0



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Date: 06 Jun 2024

PCN #: 060624-1

PCN Title: Additional 2nd wafer source for MBRBL40120CT-TP&MBRL60100CT-BP.

Dear Customer.

This is a PCN announcement to the above-mentioned product which is/are offered by Micro Commercial Components Corp (MCC). We would appreciate your acknowledgement of receipt of this notification within 30 days of the date of this PCN to your local ISR, sales representative. Please refer to the attached document for more information (including implementation date / product date code of this change). If you have any questions or concerns related to this PCN, please contact your local sales representative / ISR for support. *Sincerely, MCC*

*PCN Team*

Thank you.

Yours sincerely,

PCN Team