



Date: Apr 27, 2023

PCN No#: 042723-1

PCN Title: Additional Qualified Assembly and Test(A/T) Site for SOT-363 Parts

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Micro Commercial Components Corp(MCC) .We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local sales representative to acknowledge receipt of this PCN.

If you have any questions about PCN's products, please contact your local sales representative.

Sincerely,

MCC PCN Team



## PRODUCT CHANGE NOTICE

Notification Date	Implementation Date	Change Type	Classification	PCN No
Apr 27, 2023	Jul 27, 2023	Additional Qualified Assembly and Test(A/T) Site	Major	042723-1
<b>TITLE</b>				
Additional Qualified Assembly and Test(A/T) Site SOT-363 Parts				
<b>DESCRIPTION OF CHANGE</b>				
To solve our delivery issue of SOT-363 Parts, MCC has determined to add Additional Qualified Assembly and Test(A/T) Site for SOT-363 Parts. 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>IMPACT</b>				
No change in datasheet electrical parameters . Add second source wafer to the impact products. Add second source Leadframe to some products. Table A: Lead frame comparison.				
<b>PRODUCTS AFFECTED</b>				
Table B: Affected Parts List				
<b>WEB LINKS</b>				
<b>Terms And Conditions:</b>	<a href="https://www.mccsemi.com/Home/TermsAndConditions">https://www.mccsemi.com/Home/TermsAndConditions</a>			
<b>For More Information Contact:</b>	<a href="https://www.mccsemi.com/Contact/Index">https://www.mccsemi.com/Contact/Index</a>			
<b>Products:</b>	<a href="https://www.mccsemi.com/ProductCategories">https://www.mccsemi.com/ProductCategories</a>			
<b>DISCLAIMER</b>				
Unless a MCC Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.				

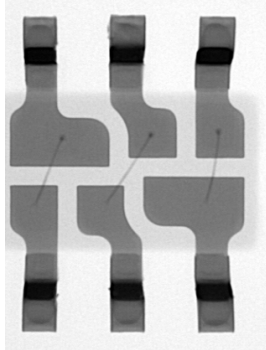
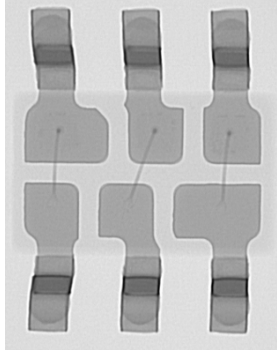
Table A - Lead Frame Comparison		
	Old	New
<b>Lead Frame</b> (Example: MMBD4448HTW-TP)		

Table : Affected Parts List			
UMD3N-TP	UMH11N-TP	UMH2N-TP	DMMT3906-TP
BC847BS-TP	UMH1N-TP	BAT54CDW-TP	BAS40DW-06-TP
BAS70DW-05-TP	MMBD4448DW-TP	BAV99BRW-TP	BAV70DW-TP
BAW56DW-TP	BAT54DW-TP	BAS70DW-06-TP	BAS40DW-04-TP
BAS40DW-04-TP-HF	BAT54BRW-TP	BAS70DW-04-TP	BAS40BRW-TP
BAT54TW-TP	BAT54SDW-TP	BAT54ADW-TP	MMBD4448HADW-TP
MMBD4448HTW-TP	BAS70BRW-TP	MMBD4448HCQW-TP	MMBD4448HCDW-TP
BAS16TW-TP	BAS40TW-TP	MMBD4148TW-TP	SD103ATW-TP
BAS70TW-TP	ESD5V0K5-TP		

# Reliability Report

**Part Number: BC847BS-TP**

**Date: 2023-01-10**

## Test Results

Test Item	Conditions	Duration	Quantity	Rejects
<b>TEST</b> Pre- and Post-Stress Electrical Test	$T_a = 25\text{ °C}$	N/A	all parts	see below
<b>PC</b> Preconditioning	JESD22A-113 Temperature Cycling: $-40\text{ °C} \sim 60\text{ °C}$ Bake $T_a = 125\text{ °C}$ Soak $T_a = 85\text{ °C}$ , RH = 85% Reflow soldering	5Cycles; 24 hours 168 hours 3 cycles	308Pcs	0
<b>HTRB</b> High Temperature Reverse Bias	JESD22-A108 $T_j = T_{jmax}$ , 80% $V_{CBO}$	1000 hours	77Pcs	0
<b>TC</b> Temperature Cycling	JESD22-A104 $-55\text{ °C}$ to $150\text{ °C}$	1000 cycles	77Pcs	0
<b>AC</b> Autoclave	JESD22-A102 $T_a = 121\text{ °C}$ , RH = 100 %, 15 psig	96 hours	77Pcs	0
<b>H3TRB</b> High Humidity High Temperature Reverse Bias	JESD22-A101 $T_a = 85\text{ °C}$ , RH = 85%, 80 % $V_R$ (Max=100V)	1000 hours	77Pcs	0
<b>IOL</b> Intermittent Operating Life	MIL-STD-750 Method 1037 $t_{on} = t_{off}$ , devices powered to insure $\Delta T_j = 100\text{ °C}$ for 15000 cycles	1000 hours	77Pcs	0
<b>ESD</b> <b>Human Body Model</b>	JESD22-A114 2 KV	N/A	30Pcs	0
<b>RSH</b> Resistance to Solder Heat	JESD22-A111 / JESD22-B106 $260\text{ °C}$ (+5,-0) °C	10 s	30Pcs	0
<b>SD</b> Solderability	J-STD-002 $235\text{ °C} \pm 5\text{ °C}$ , $S \geq 95\%$	3 s	10Pcs	0
<b>HTSL</b> High Temperature Storage Life	JESD22-A103 $T_a \geq 150\text{ °C}$	1000 hours	77Pcs	0

## Reliability Report

Part Number:MMBD4448HCDW-TP

Date: 2022-12-22

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>PC</b> Preconditioning	JESD22A-113 Temperature Cycling:-40 °C ~ 60 °C Bake T <sub>a</sub> = 125 °C Soak T <sub>a</sub> = 85 °C, RH = 85% Reflow soldering	5Cycles; 24 hours 168 hours 3 cycles	308Pcs	0
<b>HTRB</b> High Temperature Reverse Bias	JESD22-A108 T <sub>j</sub> = T <sub>jmax</sub> , V <sub>R</sub> > 80% of max. breakdown voltage	1000 hours	77Pcs	0
<b>TC</b> Temperature Cycling	JESD22-A104 -55 °C to T <sub>jmax</sub>	1000 cycles	77Pcs	0
<b>AC</b> Autoclave	JESD22-A102 T <sub>a</sub> = 121 °C, RH = 100 % Pressure = 2atm	96 hours	77Pcs	0
<b>H3TRB</b> High Humidity High Temperature Reverse Bias	JESD22-A101 T <sub>a</sub> = 85 °C, RH = 85%, V <sub>R</sub> > 80 % of rated breakdown voltage	1000 hours	77Pcs	0
<b>IOL</b> Intermittent Operating Life	MIL-STD-750 Method 1037 t <sub>on</sub> = t <sub>off</sub> , devices powered to insure ΔT <sub>j</sub> = 100 °C for 15000 cycles	1000 hours	77Pcs	0
<b>ESD</b> <b>Human Body Model</b>	JESD22-A114 4 KV	N/A	30Pcs	0
<b>RSH</b> Resistance to Solder Heat	JESD22-A111 / JESD22-B106 260 °C ± 5 °C	10 s	30Pcs	0
<b>SD</b> Solderability	J-STD-002 245 °C ± 5 °C	3 s	10Pcs	0
<b>LTSL</b> Low Temperature Storage Life	JESD22-A119 T <sub>a</sub> ≤ -55 °C	1000 hours	32Pcs	0
<b>HTSL</b> High Temperature Storage Life	JESD22-A103 T <sub>a</sub> ≥ 150 °C	1000 hours	77Pcs	0