



130 W Cochran St, Unit B

Simi Valley, CA 93065

Tel:818-701-4933

Process Change Notification (PCN)

Notification number:	031325-1
Notification date:	13 Mar 2025
Proposed implementation date:	13 Jun 2025 (90 days notification before change, according to JEDEC standard)
Product type affected:	Please refer to below Appendix
Change Category	Additional new 2 nd source
Change Classification	Major
Change description:	To ensure the ability to continue business operation, it has determined with 2nd source (Dual) in case of unforeseen event interruption. Remark: 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.
Reason for change:	To support increasing market demand and supply continuity.
Deposition of old product	Existing inventory will ship until depleted.
Identification of Changed product:	Identify the change based on Lot NO & DC of label.
Contact person:	Please contact your respective Account manager (AM) / Inside sales representative (ISR/CSR) if you have further query.
Approved by:	TH Koay (Director of Product) Steve Zhang (Director of Supply Chain) Seaman Wu (Director of Quality) Pamela Cheng (GM & EVP of Sales)



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Appendix 1: 2nd source of Leadframe

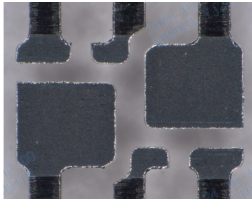
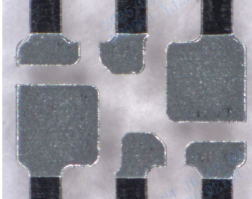
No.	Product type	Package	No.	Product type	Package
1	2N7002DW-TP	SOT-363	31	BC856S-TP-HF	SOT-363
2	2N7002DW-TPQ2	SOT-363	32	BC856SS-TP	SOT-363S
3	2N7002KDW-13P	SOT-363	33	BC857BS-TP	SOT-363
4	2N7002KDW-TP	SOT-363	34	BC857BS-TPQ2	SOT-363
5	2N7002KDW-TP-C01	SOT-363	35	BC857S-13P	SOT-363
6	2N7002KDW-TP-HF	SOT-363	36	BC857S-TP	SOT-363
7	2N7002KDW-TP-L01	SOT-363	37	BC857S-TP-HF	SOT-363
8	2N7002KDW-TPQ2	SOT-363	38	BC857S-TPQ2	SOT-363
9	2N7002KDW-TPQ2-L01	SOT-363	39	BSS123DWS-TP	SOT-363S
10	2N7002KDWS-TP	SOT-363S	40	BSS138AKDW-TP	SOT-363
11	BC846BPN-13P	SOT-363	41	BSS138AKDW-TPQ2	SOT-363
12	BC846BPN-TP	SOT-363	42	BSS138AKDWS-TP	SOT-363S
13	BC846BPN-TPQ2	SOT-363	43	BSS138ALKDW-TP	SOT-363
14	BC846BS-13P	SOT-363	44	BSS138BKDW-TP	SOT-363
15	BC846BS-TP	SOT-363	45	BSS138BKDW-TPQ2	SOT-363
16	BC846BS-TPQ2	SOT-363	46	BSS138BKDW-TPQ2-L01	SOT-363
17	BC846BSS-TP	SOT-363S	47	BSS8402DW-TP	SOT-363
18	BC846S-TP	SOT-363	48	BSS84DW-TP	SOT-363
19	BC846S-TPQ2	SOT-363	49	BSS84KDW-TP	SOT-363
20	BC847BS-13P	SOT-363	50	BSS84KDW-TPQ2	SOT-363
21	BC847BS-TP	SOT-363	51	BSS84KDWS-TP	SOT-363
22	BC847BS-TPQ2	SOT-363	52	DMMT3904-TP	SOT-363
23	BC847BSS-TP	SOT-363S	53	DMMT3906-TP	SOT-363
24	BC847PN-13P	SOT-363	54	MC7252KDW-TP	SOT-363
25	BC847PN-TP	SOT-363	55	MC7252KDWA-TP	SOT-363
26	BC847PN-TPQ2	SOT-363	56	MC7252KDWA-TP	SOT-363S
27	BC856BS-TP	SOT-363	57	MMBD4448DW-TP	SOT-363
28	BC856BS-TPQ2	SOT-363	58	MMDT2222A-TP	SOT-363
29	BC856S-13P	SOT-363	59	MMDT2227-TP	SOT-363
30	BC856S-TP	SOT-363	60	MMDT2907A-TPQ2	SOT-363



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61	MMDT3904-TP	SOT-363	96	UMB10N-TP	SOT-363
62	MMDT3904-TP-B031	SOT-363	97	UMB11N-TP	SOT-363
63	MMDT3904-TPQ2	SOT-363	98	UMB13N-TP	SOT-363
64	MMDT3904S-TP	SOT-363S	99	UMB18N-TP	SOT-363
65	MMDT3904S-TPQ2	SOT-363S	100	UMB18N-TPQ2	SOT-363
66	MMDT3906-TP	SOT-363	101	UMB1N-TP	SOT-363
67	MMDT3906-TPQ2	SOT-363	102	UMB2N-TP	SOT-363
68	MMDT3946-TP	SOT-363	103	UMB2NS-TP	SOT-363S
69	MMDT3946-TPQ2	SOT-363	104	UMB9N-TP	SOT-363
70	MMDT4401-TP	SOT-363	105	UMD10N-TP	SOT-363
71	MMDT4403-TP	SOT-363	106	UMD11N-TP	SOT-363
72	MMDT4413-TP	SOT-363	107	UMD12N-TP	SOT-363
73	MMDT5401-TP	SOT-363	108	UMD12N-TPQ2	SOT-363
74	MMDT5451-TP	SOT-363	109	UMD12NS-TP	SOT-363S
75	MMDT5551-TP	SOT-363	110	UMD12NS-TPQ2	SOT-363S
76	SI2124DW-TP	SOT-363	111	UMD13N-TP	SOT-363
77	SI2129DW-TP	SOT-363	112	UMD15N-TP	SOT-363
78	SI2429DW-TP	SOT-363	113	UMD16N-TP	SOT-363
79	SI3134KDWA-TP	SOT-363	114	UMD18N-TP	SOT-363
80	SI3134KDWA-TPQ2	SOT-363	115	UMD22N-TP	SOT-363
81	SI3134KD WAS-TP	SOT-363S	116	UMD2N-TP	SOT-363
82	SI3134KD WAS-TPQ2	SOT-363S	117	UMD2NS-TP	SOT-363S
83	SI3139KDW-TPAU	SOT-363	118	UMD3N-TP	SOT-363
84	SI3139KDWA-TP	SOT-363	119	UMD3N-TPQ2	SOT-363
85	SI3139KD WAS-TP	SOT-363S	120	UMD9N-TP	SOT-363
86	SI3439KDWA-TP	SOT-363	121	UMD9N-TPQ2	SOT-363
87	SI3439KD WAS-TP	SOT-363S	122	UMF21N-TP	SOT-363
88	SI6303KDWS-TP	SOT-363S	123	UMH10N-TP	SOT-363
89	UM6K1NA-TP	SOT-363	124	UMH11N-13P	SOT-363
90	UM6K1NA-TPQ2	SOT-363	125	UMH11N-TP	SOT-363
91	UMH13N-TP	SOT-363	126	UMH2N-TP	SOT-363
92	UMH13N-TP-HF	SOT-363	127	UMH3N-TP	SOT-363
93	UMH15N-TP	SOT-363	128	UMH9N-TP	SOT-363
94	UMH18N-TP	SOT-363	129	UMT1N-TP	SOT-363
95	UMH1N-TP	SOT-363	130	UMX1N-TP	SOT-363

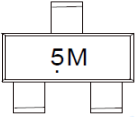
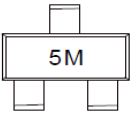
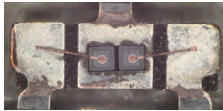
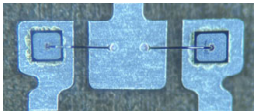
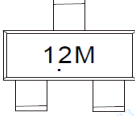
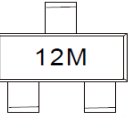
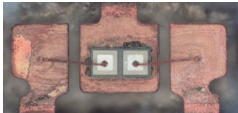
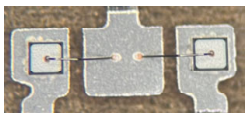
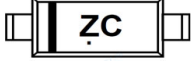
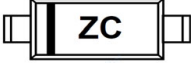
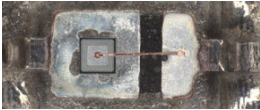
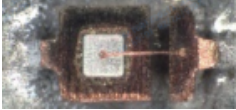
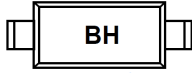
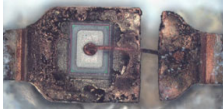
Table1: Leadframe Comparison

Category	Old source	New source
Leadframe		

Appendix 2: 2nd source of product

No.	Product type	Existing marking	New marking	Package type/code
1	SM05-TP	5M	5M	SOT-23
2	SM12-TP	12M	12M	SOT-23
3	ESD12VD3-TP	ZC	ZC	SOD-323
4	ESD12VD3-TP-HF	ZC	ZC	SOD-323
5	ESDLC5V0D5B-TP	BH	BH	SOD-523
6	ESDLC5V0D5B-TP-HF	BH	BH	SOD-523

Table2: Product Comparison

Part No	Item	Before	After
SM05-TP	Marking		
	De-cap		
SM12-TP	Marking		
	De-cap		
ESD12VD3-TP ESD12VD3-TP-HF	Marking		
	De-cap		
ESDLC5V0D5B-TP ESDLC5V0D5B-TP-HF	Marking		
	De-cap		

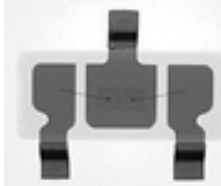
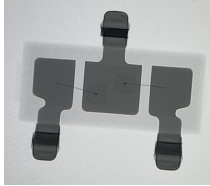


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Appendix 3: 2nd source of Internal Structure

No.	Product type	Existing marking	New marking	Package type/code
1	DZ23C9V1-TP	KVE	KVE.	SOT-23
2	DZ23C15-TP	V19	V19.	SOT-23
3	DZ23C24-TP	KVO	KVO.	SOT-23
4	DZ23C27-TP	KVP	KVP.	SOT-23

Table3: Internal Structure Comparison

Category	Old source	New source
Internal Structure		



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Reliability Report

Part Number: MMDT3904-TP

Date: 2024-10-10

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1.Temperature Cycling:-40 °C ~ 60 °C , 2.Bake:125 °C , 3.Moisture Soak:85 °C , 8 5%RH for MSL1; 4.Reflow*3Cycles:260 °C	5Cycles; 24 hours; 168hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 80% V _{cb0}	1000 hours	77Pcs	0
IOL Intermittent Operational Life	MIL-STD-750 Method 1037 ▲T _j ≥ 100 °C, 2min ON/2min OFF	15000Cycles	77Pcs	0
TC Temperature Cycling	JESD22-A104 -55 °C (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
UHASt Unbiased Highly Accelerated Stress	JESD22-A118 T _a = 130 °C ± 2 °C , RH = 85% ± 5% ,	96 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+ 5 , - 0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HAST High Humidity High Temperature Reverse Bias	110 ± 5 °C , 8 5% ± 5%RH, 80%V _{cb0} (Max=42V)	264 hours	77 Pcs	0



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Reliability Report

Part Number: 2N7002KDW-TP

Date: 2024-11-12

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1.Temperature Cycling:-40 °C ~ 60 °C , 2.Bake:125 °C , 3.Moisture Soak:85 °C , 8 5%RH for MSL1; 4.Reflow*3Cycles:260 °C	5Cycles; 24 hours; 168hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 80% VDS	1000 hours	77Pcs	0
HTGB High Temperature Reverse Bias	JESD22-A108 T _j = T _{jmax} , 100% VGS	1000 hours	77Pcs	0
IOL Intermittent Operational Life	MIL-STD-750 Method 1037 ▲ T _j ≥ 100 °C ,2min ON/2min OFF	15000Cycles	77Pcs	0
TC Temperature Cycling	JESD22-A104 -55 °C (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
UHASt Unbiased Highly Accelerated Stress	JESD22-A118 T _a = 130 °C±2 °C , RH =85%±5% ,	96 hours	77Pcs	0
HAST High Humidity High Temperature Reverse Bias	110±2 °C , 8 5%±5%RH, 80%Vds (Max=42V)	264 hours	77 Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+5 , -0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0

Remark : detail MSL of product refer to data sheet on MCC website.



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Reliability Report

Part Number: SM05-TP/SM12-TP

Date: 2025-1-12

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1. Temperature Cycling:-40 °C ~ 60 °C , 2. Bake:125 °C , 3. Moisture Soak:85 °C , 8 5%RH for MSL1; 4. Reflow*3Cycles:260 °C	5Cycles; 24 hours; 192hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 100% VR	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 55 °C (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C±2 °C , RH = 100 % , 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C±2 °C , RH = 85%±5% , 100 % VR (VR MAX=100V)	1000 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+5 , -0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0

*Remark : detail MSL of product refer to data sheet on MCC website.



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Reliability Report

Part Number: ESD12VD3-TP

Date: 2024-12-24

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1. Temperature Cycling:-40 °C ~ 60 °C , 2. Bake: 125 °C , 3. Moisture Soak: 85 °C , 8 5%RH for MSL1; 4. Reflow*3Cycles: 260 °C	5Cycles; 24 hours; 192hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 100% VR	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 55 °C (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C ± 2 °C , RH = 100 % , 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C ± 2 °C , RH = 85% ± 5% , 100 % VR (VR MAX=100V)	1000 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+ 5 , - 0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0

*Remark : detail MSL of product refer to data sheet on MCC website.



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Reliability Report

Part Number: ESDLC5V0D5B-TP

Date: 2024-12-24

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1.Temperature Cycling:-40℃~60℃, 2.Bake:125℃, 3. Moisture Soak:85℃, 8 5%RH for MSL1; 4. Reflow*3Cycles:260℃	5Cycles; 24 hours; 192hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 100% VR	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 55℃(+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C±2℃, RH = 100 %, 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C±2℃, RH = 85%±5%, 100 % VR (VR MAX=100V)	1000 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+5, -0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0

*Remark : detail MSL of product refer to data sheet on MCC website.



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Reliability Report

Part Number: DZ23C9V1-TP&DZ23C15-TP&DZ23C24-TP&DZ23C27-TP

Date: 2025-01-14

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST				
Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning for MSL 1	JESD22A-113 1. Temperature Cycling: -40 °C ~ 60 °C , 2. Bake: 125 °C , 3. Moisture Soak: 85 °C , 8 5%RH for MSL1; 4. Reflow*3Cycles: 260 °C	5Cycles; 24 hours; 168hours 3Cycles	308Pcs	0
SSOP Steady State Operational	MIL-STD-750 -1 Method 1038 condition B T _j = T _{jmax} , T _a = 25 ± 5 °C , PD = Max (I _{zm} = PD/VZ)	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 -55 °C (+0, -10)/15Min~ 150(+15, -0)/15Min,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C ± 2 °C , RH = 100 % , 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C ± 2 °C , RH = 85% ± 5% , 100 % VR (VR MAX = 100V)	1000 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+ 5 , - 0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 T _{stg} Max	1000 hours	77Pcs	0

*Remark : detail MSL of product refer to data sheet on MCC website.



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Date: 13 Mar 2025

PCN #: 031325-1

PCN Title: Additional new 2nd source

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