

Process Change Notification (PCN)

Notification number:	113023-1				
Notification date:	30 Nov 2023				
Proposed implementation date:	30 Nov 2023				
Product type affected:	Please refer to table 1 in Appendix 1.				
Change Category	Errata change				
Change Classification	Major				
Change description:	Change V _{GS(th)} range of MCTL270N04Y-TP from current 2.6~4.4 to 2~4V.				
Reason for change:	Improve FT yield				
Deposition of old product	NA				
Identification of Changed product:	No changes to product marking				
Contact person:	Please contact your respective Account manager (AM) / Inside sales representative (ISR/CSR) if you have further query.				
Approved by:	Seaman Wu (Director of Engineering) Steve Zhang (Director of Supply Chain) Woods Zhang (Director of Quality) Pamela Cheng (GM & EVP of Sales)				



Appendix 1: Table 1

No.	Product type	Existing marking	New marking	Package type/code
1	MCTL270N04Y-TP	MCTL270N04Y	MCTL270N04Y	TOLL-8L



Reliability Report

Part Number: MCTL270N04Y-TP

Date: 2023-10-18

Test Results

Test Item	Conditions	Duration	Quantity	Reject
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
PC Preconditioning	JESD22A-113 Bake T_a = 125 °C Soak T_a = 85 °C, RH = 85% Reflow soldering	24 hours 168 hours 3 cycles	308Pcs	0
HTRB High Temperature Reverse Bias	JESD22-A108 $T_{j} = T_{jmax}, V_{R} > 80\% \text{ VDSS}$	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 -55 °C to T _{jmax}	1000 cycles	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C, RH = 100 % Pressure = 2atm	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C, RH = 85%, V _R > 80 % VDSS	1000 hours	77Pcs	0
IOL Intermittent Operating Life	MIL-STD-750 Method 1037 $t_{on} = t_{off}$, devices powered to insure $\Delta T_{j} = 100 ^{\circ}\text{C}$ for 15000 cycles	1000 hours	77Pcs	0
RSH Resistance to Solder Heat	JESD22-A111 / JESD22-B106 260 °C ± 5 °C	10 s	30Pcs	0
SD Solderability	J-STD-002 245 °C ± 5 °C	3 s	10Pcs	0
LTSL Low Temperature Storage Life	JESD22-A119 Ta≤-55 ℃	1000 hours	77Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 T _a ≥150 °C	1000 hours	77Pcs	0
High Temperature	JESD22-A108 150°C ,100%VGS	1000 hours	77Pcs	0



Date: 30 Nov 2023

PCN #: 113023-1

PCN Title: Change V_{GS(th)} range of MCTL270N04Y-TP from current 2.6~4.4 to 2~4V.

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