Product Bulletin

Document #:PB26512Z
Issue Date:03 Dec 2024

Title of Change:	Correction of the Continuous Drain Current and Power dissipation for Rthjc and Rthja value in datasheet of NVMFS3D6N10MCL
Effective date:	03 Dec 2024
Contact information:	Contact your local onsemi Sales Office or saziela.senin@onsemi.com
Type of notification:	This Product Bulletin is for notification purposes only. onsemi will proceed with implementation of this change upon publication of this Product Bulletin.
Change Category:	other
Change Sub-Category(s):	Datasheet/Product Doc change

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	None

Description and Purpose:

This Product Bulletin is to announce that onsemi is correcting continuous drain current, power dissipation, Rthjc and Rthja value in datasheet of NVMFS3D6N10MCL. There is no change to the product BOM and assembly process. There is no product marking change.

Parameter	Before	After
Continuous Drain Current $R_{\theta JC}$, T_C =100°C Continuous Drain Current $R_{\theta JC}$ (Notes 1, 3) — Steady State — T_C = 25°C: I_D = 132 A; T_C = 100°C: I_D = 84 A	84A	94A
Power Dissipation $R_{\theta JC}$, T_C= 100°C Power Dissipation $R_{\theta JC}$ (Note 1) — Steady State — T_C = 25°C: P_D = 139 W; T_C = 100°C: P_D = 56 W	56A	69A
Continuous Drain Current $R_{\theta JA}$, T_A =25°C Continuous Drain Current $R_{\theta JA}$ (Notes 1, 2, 3) — Steady State — T_A = 25°C: I_D = 20 A; T_A = 100°C: I_D = 13 A	20A	19A
Continuous Drain Current $R_{\theta JA}$, T_A =100°C Continuous Drain Current $R_{\theta JA}$ (Notes 1, 2, 3) — Steady State — T_A = 25°C: I_D = 20 A; T_A = 100°C: I_D = 13 A	13A	14A
Power Dissipation $R_{\theta JA}$, T_A= 25°C Power Dissipation $R_{\theta JA}$ (Notes 1, 2) — Steady State — T_A = 25°C: P_D = 3.2 W; T_A = 100°C: P_D = 1.3 W	3.2A	3A
Power Dissipation $R_{\theta JA}$, T_A= 100°C Power Dissipation $R_{\theta JA}$ (Notes 1, 2) — Steady State — T_A = 25°C: P_D = 3.2 W; T_A = 100°C: P_D = 1.3 W	1.3A	1.5A
Thermal Resistance Maximum Rating RthjC Junction–to–Case – Steady State: $R_{\theta JC}$ = 0.9 °C/W Junction–to–Ambient – Steady State (Note 2): $R_{\theta JA}$ = 39 °C/W	0.9°C/W	1.08°C/W

Thermal Resistance Maximum Rating RthjA

Parameter	Symbol	Value	Unit
Junction−to−Case − Steady State	$R_{\theta JC}$	0.9	°C/W
Junction−to−Ambient − Steady State (Note 2)	$R_{\theta JA}$	39	

	39°C/W	50°C/W

List of Affected Standard Parts:

***Note**: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.*

NVMFS3D6N10MCLT1G		