Product Bulletin

Document #:PB24257ZA
Issue Date:14 Nov 2021

Title of Change:	Update 820A and 950A Single Side Direct Cooling 6-Pack Power Module data sheet
Effective date:	14 Nov 2021
Contact information:	Contact your local onsemi Sales Office or SayMeng.Lim@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:	Datasheet Change
Change Sub-Category(s):	Datasheet/Product Doc change

Sites Affected:

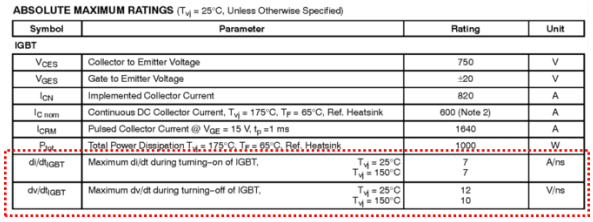
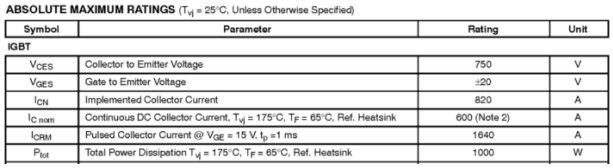
onsemi Sites	**External Foundry/Subcon Sites**
None	None

Description and Purpose:

This Product Bulletin is to inform that, onsemi is updating the datasheet in the affected part list with the following change and justification.

1. **Change description**: Remove the maximum di/dt (IGBT) & maximum dv/dt (IGBT) from the *Absolute Maximum Rating* Table (Page 3)

Purpose: Guidance on maximum dI/dt and dV/dt slew rates available in Application Notes upon request.

	Before Change Description	**After Change Description**
Datasheet	With the maximum di/dt and maximum dv/dt 	Without the maximum di/dt and maximum dv/dt 

ABSOLUTE MAXIMUM RATINGS (T_{vj} = 25°C, Unless Otherwise Specified)

Symbol	Parameter	Rating	Unit
IGBT			
V_{CES}	Collector to Emitter Voltage	750	V
V_{GES}	Gate to Emitter Voltage	±20	V
I_{CN}	Implemented Collector Current	820	A
$I_{C\ nom}$	Continuous DC Collector Current, T_{vj} = 175°C, T_F = 65°C, Ref. Heatsink	600 (Note 2)	A
I_{CRM}	Pulsed Collector Current @ V_{GE} = 15 V, t_p =1 ms	1640	A
P_{tot}	Total Power Dissipation T_{vj} = 175°C, T_F = 65°C, Ref. Heatsink	1000	W
di/dt_{IGBT}	Maximum di/dt during turning−on of IGBT, T_{vj} = 25°C T_{vj} = 150°C	7 7	A/ns
dv/dt_{IGBT}	Maximum dv/dt during turning−off of IGBT, T_{vj} = 25°C T_{vj} = 150°C	12 10	V/ns

ABSOLUTE MAXIMUM RATINGS (T_{vj} = 25°C, Unless Otherwise Specified)

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I_{CRM}	Pulsed Collector Current @ V_{GE} = 15 V, t_p =1 ms	1640	A
P_{tot}	Total Power Dissipation T_{vj} = 175°C, T_F = 65°C, Ref. Heatsink	1000	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**.*

NVH950S75L4SPC	NVH950S75L4SPB	NVH820S75L4SPD
NVH820S75L4SPB	NVH820S75L4SPA	

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NVH820S75L4SPB		NA		