

#### **Pin Description**

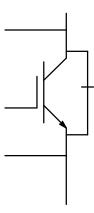


Figure 1. Pin Description

## **MODULE CHARACTERISTICS** ( $T_{vj} = 25$ °C, Unless Otherwise Specified)

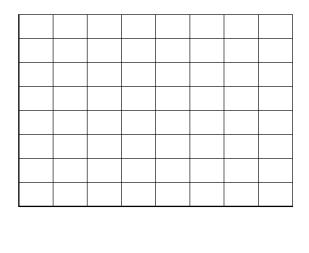
Symbol	Parameter	Rating	Unit
$T_{vj}$	Operating Junction Temperature	-40 to 175	°C
T <sub>STG</sub>	Storage Temperature	-40 to 125	°C
$V_{ISO}$	Isolation Voltage (DC, 0 Hz, 1 s)	4200	V
L <sub>sCE</sub>	Stray Inductance	8	nΗ
RCC'+EE'	Module Lead Resistance, Terminals – Chip	0.75	mΩ
G	<del>-</del>	-	-

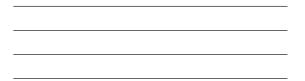
VE-Trac™ Direct Module NVH820S75L4SPC						

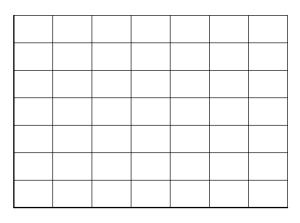
#### **CHARACTERISTICS OF INVERSE DIODE** ( $T_{vj} = 25^{\circ}C$ , Unless Otherwise Specified)

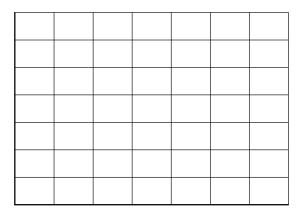
Symbol	Parameters	Conditions		Min	Тур	Max	Unit
V <sub>F</sub>	Diode Forward Voltage (Terminal)	I <sub>F</sub> = 600 A	T <sub>vj</sub> = 25°C	_	1.70	1.95	V
	Diode Forward Voltage (Chip)	I <sub>F</sub> = 600 A	$T_{vj} = 25^{\circ}C$ $T_{vj} = 150^{\circ}C$ $T_{vj} = 175^{\circ}C$	- - -	1.60 1.55 1.50	1.85 - -	
		I <sub>F</sub> = 820 A	$T_{vj} = 25^{\circ}C$ $T_{vj} = 150^{\circ}C$ $T_{vj} = 175^{\circ}C$	- - -	1.70 1.70 1.65	- - -	
E <sub>rr</sub>	Reverse Recovery Energy	$I_F = 600 \text{ A}, V_R = 400 \text{ V},$ $V_{GE} = -8 \text{ V},$ $Rg.on = 4 \Omega$					

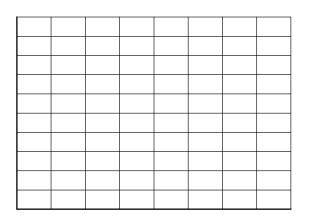
#### **TYPICAL CHARACTERISTICS**



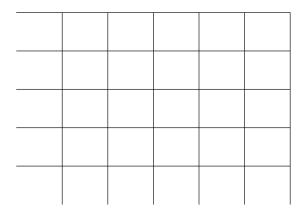


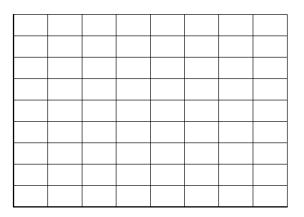


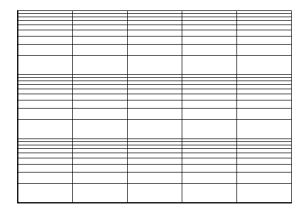




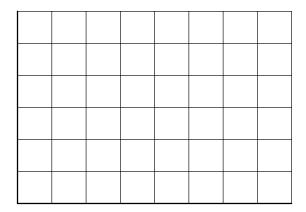
#### **TYPICAL CHARACTERISTICS**

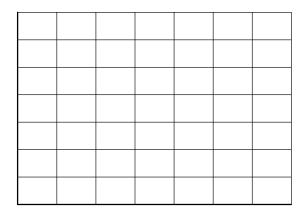


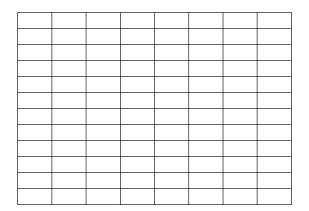


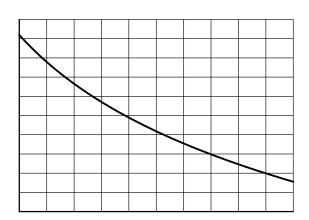


#### **TYPICAL CHARACTERISTICS**









#### SSDC33, 154.50x92.0 (SPC) CASE 183AC ISSUE A

DATE 11 DEC 2019

#### **GENERIC MARKING DIAGRAM\***

XXXXXXXXXXXXXXXXXXXXXX ATYYWW

XXXXX = Specific Device Code

G = Pb-Free Package
AT = Assembly & Test Site Code

YYWW= Year and Work Week Code

\*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "•", may or may not be present. Some products may not follow the Generic Marking.

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