



Product Description

Pin Description

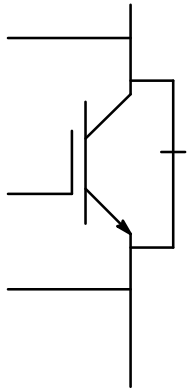


Figure 1. Pin Description

# VE-Trac™ Direct Module NVH640S75L4SPC

## MODULE CHARACTERISTICS (T<sub>vj</sub> = 25°C, Unless Otherwise Specified)

Symbol	Parameter	Rating	Unit
T <sub>vj</sub>	Operating Junction Temperature	-40 to 175	°C
T <sub>STG</sub>	Storage Temperature	-40 to 125	°C
V <sub>ISO</sub>	Isolation Voltage (DC, 0 Hz, 1 s)	4200	V
L <sub>sCE</sub>	Stray Inductance	8	nH
RCC'+EE'	Module Lead Resistance, Terminals – Chip	0.8	mΩ
G	Module Weight	700	g
CTI	Comparative Tracking Index	>200	–
d <sub>creep</sub>	Creepage: Terminal to Heatsink Terminal to Terminal	9.0 9.0	mm
d <sub>clear</sub>	Clearance: Terminal to Heatsink Terminal to Terminal	4.5 4.5	mm

Symbol	Parameters	Conditions	Min	Typ	Max	Unit
Δp	Pressure Drop in Cooling Circuit					



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

Symbol	Parameters	Conditions		Min	Typ	Max	Unit
$V_F$	Diode Forward Voltage (Terminal)	$I_F = 450 \text{ A}$	$T_{vj} = 25^{\circ}\text{C}$	–	1.70	2.02	V
	Diode Forward Voltage (Chip)	$I_F = 450 \text{ A}$	$T_{vj} = 25^{\circ}\text{C}$	–	1.59	1.91	
			$T_{vj} = 150^{\circ}\text{C}$	–	1.54	–	
		$I_F = 640 \text{ A}$	$T_{vj} = 175^{\circ}\text{C}$	–	1.51	–	
			$T_{vj} = 25^{\circ}\text{C}$	–	1.79	–	
			$T_{vj} = 150^{\circ}\text{C}$	–	1.80	–	
			$T_{vj} = 175^{\circ}\text{C}$	–	1.81	–	
$E_{rr}$	Reverse Recovery Energy	$I_F = 450 \text{ A}, V_R = 400 \text{ V}, V_{GE} = -8 \text{ V}, R_{g,on} = 2.8 \Omega$		$di/dt = 2.8 \text{ A/ns}, T_{vj}$			

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# VE-Trac™ Direct Module NVH640S75L4SPC

## TYPICAL CHARACTERISTICS




**VE-Trac™ Direct Module NVH640S75L4SPC**

# VE-Trac™ Direct Module NVH640S75L4SPC

## PACKAGE DIMENSIONS

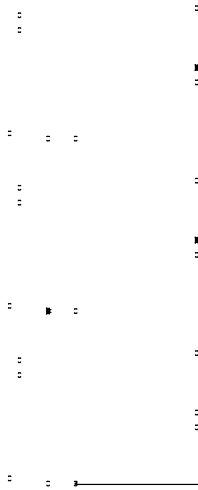
**SSDC33, 154.50x92.0 (SPC)**  
CASE 183AC  
ISSUE A

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# VE-Trac™ Direct Module NVH640S75L4SPC

## PACKAGE DIMENSIONS

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



**VE-Trac™ Direct Module NVH640S75L4SPC**