

Product Description

The NVG600A75L4DSE2 is part of VE Trac $^{\text{\tiny M}}$ Dual family of power modules with dual side cooling and compact footprints for

ABSOLUTE MAXIMUM RATINGS (T_{VJ} = 25°C, unless otherwise specified)

Symbol	Parameter	Rating	Unit	
ВТ			•	
V _{CES}	Collector to Emitter Voltage	750	V	
V_{GES}	Gate to Emitter Voltage	±20	V	
I _{CN}	Implemented Collector Current	600	А	
I _{C nom}	Continuous DC Collector Current, Tvjmax = 175°C, T _F = 65°C, Ref. Heatsink	500	А	
I _{CRM}	Pulsed Collector Current @ VGE = 15 V, tp = 1 ms	1200	А	
ODE				
V_{RRM}	Repetitive Peak Reverse Voltage	750	V	
I _{FN}	Implemented Forward Current	600	А	
IF	Continuous Forward Current, Tvjmax = 175°C, T _F = 65°C, Ref. Heatsink	400	А	
I _{FRM}	Repetitive Peak Forward Current, t _p = 1 ms	1200	А	
l ² t value	$V_R = 0 \text{ V}, t_p = 10 \text{ ms}, Tv_J = 150^{\circ}\text{C}$ $T_{VJ} = 175^{\circ}\text{C}$	14000 12000	A ² s	

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

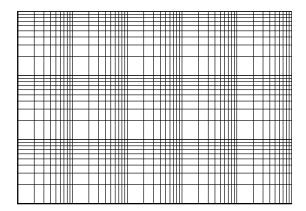
THERMAL CHARACTERISTICS

Symbol	Parameter	Min	Тур	Max	Unit
IGBT.R _{th,J-C}	Effective Rth, Junction to Case	-	0.06	0.08	°C/W
IGBT.R _{th,J-F}	Effective Rth, Junction to Fluid, λ_{TIM} = 6 W/m–K, F = 660 N 10 L/min, 65°C, 50/50 EGW, Ref. Heatsink	-	0.146	-	°C/W
Diode.R _{th,J-C}	Effective Rth, Junction to Case	_	0.10	0.13	°C/W
Diode.R _{th,J-F}	Effective Rth, Junction to Fluid, λ_{TIM} = 6 W/m–K, F = 660 N 10 L/min, 65°C, 50/50 EGW, Ref. Heatsink	_	0.196	-	°C/W

CHARACTERISTICS OF IGBT (Tvj = 25°C, unless otherwise specified)

	Parameters	Conditions		Min	Тур	Max	unit
V _{CESAT}	Collector to Emitter Saturation Voltage	$V_{GE} = 15 \text{ V}, I_{C} = 400 \text{ A},$	T_{vj} = 25°C T_{vj} = 150°C T_{vj} = 175°C				
		$V_{GE} = 15 \text{ V}, I_{C} = 600 \text{ A},$	T_{vj}				

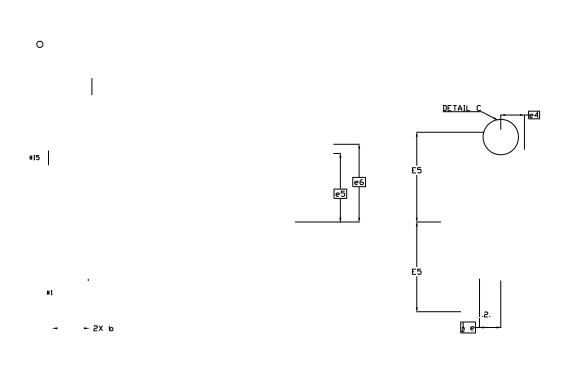
TYPICAL CHARACTERISTICS

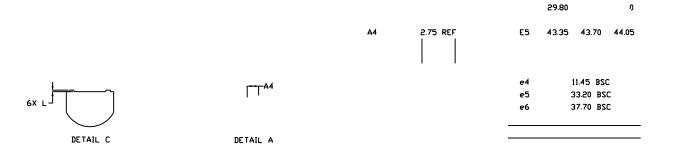


ORDERING INFORMATION

Part Number	Package	Shipping
NVG600A75L4DSE2	AHPM15-CFA Module, Case MODHQ (Pb-Free)	36 Units / 2x Blister Tray

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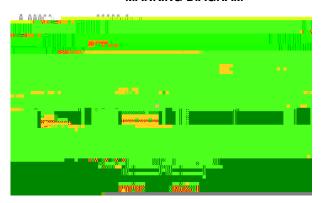


AHPM15 CFA MODULE CASE MODHQ

ISSUE A

DATE 11 JUN 2021

GENERIC MARKING DIAGRAM*



ZZZ = Assembly Lot Code ΑT = Assembly & Test Location = Year

WW = Work Week

XXXX = Specific Device 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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