

Product Overview

NGTB50N65FL2WA: IGBT, 650 V Field Stop II, 50 A

For complete documentation, see the data sheet.

This Insulated Gate Bipolar Transistor (IGBT) features a robust and cost effective Field Stop II Trench construction, and provides superior performance in demanding switching applications, offering both low on state voltage and minimal switching loss. In addition, this new device is packaged in a TO-247-4L, package that provides significant reduction in Eon Losses compared to standard TO-247-3L package. The IGBT is well suited for UPS and solar applications. Incorporated into the device is a soft and fast co-packaged free wheeling diode with a low forward voltage.

Features

- Extremely Efficient Trench with Field Stop Technology
- $T_{Jmax} = 175\text{ }^{\circ}\text{C}$
- Improved Gate Control Lowers Switching Losses
- Separate Emitter Drive Pin
- TO-247-4L for Minimal Eon Losses
- Optimized for High Speed Switching
- These are Pb-Free Devices

Applications

- Industrial

End Products

- Solar Inverters
- Uninterruptable Power Supplies (UPS)
- Neutral Point Clamp Topology

Part Electrical Specifications

Product	Compliance	Status	$V_{ES}^{(BR)C}$ Typ (V)	I_C Max (A)	$V_{GE(sat)}$ Typ (V)	V_F Typ (V)	E_{off} Typ (mJ)	E_{on} Typ (mJ)	T_{rr} Typ (ns)	I_{rr} Typ (A)	Gate Charge Typ (nC)	Short Circuit Withstand (μ s)	E_{AS} Typ (mJ)	P_D Max (W)	Co- Pack aged Diode	Pack age Type
NGTB50N65FL2WAG	Pb-free Halide free	Active	650	50	1.8	2.1	0.58	0.48	94	6.5	215	-	-	417	Yes	TO-247-4

For more information please contact your local sales support at www.onsemi.com.

Created on: 2/22/2019