

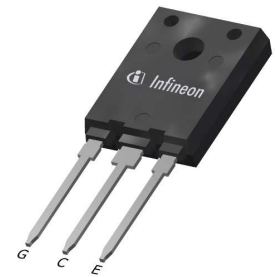
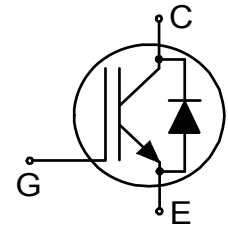
TRENCHSTOP™ Advanced Isolation

High speed switching series third generation IGBT copacked with Rapid 1 fast and soft antiparallel diode in fully isolated package

Features:

TRENCHSTOP™ technology offers :

- Low $V_{CE(sat)}$
- Short circuit withstand time $5\mu s$ at $T_{vj} = 175^{\circ}C$
- Positive temperature coefficient in $V_{CE(sat)}$
- Low EMI
- Very soft, fast recovery anti-parallel diode
- Maximum junction temperature $175^{\circ}C$
- 2500 V_{RMS} electrical isolation, 50/60 Hz, $t = 1$ min
- 100 % tested isolated mounting surface
- Pb-free lead plating; RoHS compliant
- Complete product spectrum and PSpice Models : <http://www.infineon.com/igbt>



Fully isolated package TO-247

Potential Applications:

- General Purpose Drives (GPD)
- Servo Drives
- Industrial SMPS
- Industrial UPS
- Charger
- Welding
- Solar String Inverter

Product Validation:

Qualified for industrial applications according to the relevant tests of JEDEC 47/20/22

**Key Performance and Package Parameters**

Type	V_{CE}	I_C	$V_{CEsat}, T_{vj}=25^{\circ}C$	T_{vjmax}	Marking	Package
IKFW90N60EH3	600V	75A	1.85V	$175^{\circ}C$	K90DEH3	PG-TO247-3-AI

Table of Contents

Description	1
Table of Contents	2
Maximum Ratings	3
Thermal Resistance	3
Electrical Characteristics	4
Electrical Characteristics Diagrams	6
Package Drawing	13
Testing Conditions	14
Revision History	15
Disclaimer	16