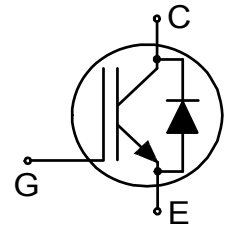


High speed switching series fifth generation

High speed fast IGBT in TRENCHSTOP™ 5 technology copacked with RAPID 1 fast and soft antiparallel diode

Features and Benefits:

- High speed F5 technology offering:
- Best-in-Class efficiency in hard switching and resonant topologies
 - 650V breakdown voltage
 - Low gate charge Q_G
 - IGBT copacked with RAPID 1 fast and soft antiparallel diode
 - Maximum junction temperature 175°C
 - Dynamically stress tested
 - Qualified according to AEC-Q101
 - Green package (RoHS compliant)
 - Complete product spectrum and PSpice Models:
<http://www.infineon.com/igbt/>



Applications:

- Off-board charger
- On-board charger
- DC/DC converter
- Power-Factor correction

Package pin definition:

- Pin 1 - gate
- Pin 2 & backside - collector
- Pin 3 - emitter



Key Performance and Package Parameters

Type	V_{CE}	I_C	$V_{CEsat}, T_{vj}=25^{\circ}C$	T_{vjmax}	Marking	Package
AIKW40N65DF5	650V	40A	1.6V	175°C	AK40EDF5	PG-TO247-3



Table of Contents

Description 1

Table of Contents 2

Maximum Ratings 3

Thermal Resistance 3

Electrical Characteristics 4

Electrical Characteristics Diagrams 7

Package Drawing13

Testing Conditions14

Revision History15

Disclaimer16