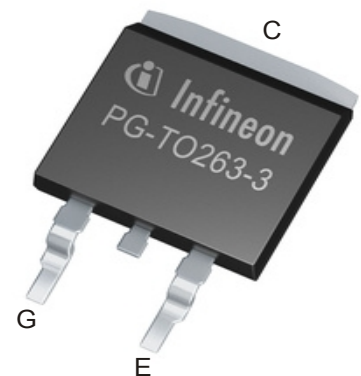
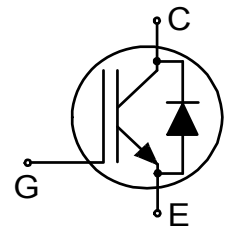


High speed switching series fifth generation

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	$V_{CE}$	$I_C$	$V_{CEsat}, T_{vj}=25^\circ\text{C}$	$T_{vjmax}$	Marking	Package
AIKB50N65DF5	650V	50A	1.6V	175°C	AK50EDF5	PG-TO263-3



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