

## IGBT

TRENCHSTOP™ 5 high Speed soft switching IGBT with full current rated RAPID 1 diode

## IKW40N65ES5

650V TRENCHSTOP™ 5 high speed soft switching duopak

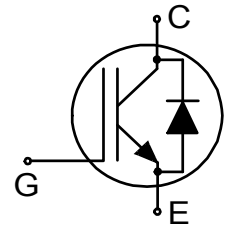
Data sheet

TRENCHSTOP™ 5 high speed soft switching IGBT copacked with full current rated RAPID 1 fast and soft antiparallel diode

**Features and Benefits:**

High speed S5 technology offering

- High speed smooth switching device for hard & soft switching
- Very Low  $V_{CEsat}$ , 1.35V at nominal current
- Plug and play replacement of previous generation IGBTs
- 650V breakdown voltage
- Low gate charge  $Q_G$
- IGBT copacked with full rated RAPID 1 fast antiparallel diode
- Maximum junction temperature 175°C
- Qualified according to JEDEC for target applications
- Pb-free lead plating; RoHS compliant
- Complete product spectrum and PSpice Models:  
<http://www.infineon.com/igbt/>



**Applications:**

- Resonant converters
- Uninterruptible power supplies
- Welding converters
- Mid to high range switching frequency converters

**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
IKW40N65ES5	650V	40A	1.35V	175°C	K40EES5	PG-TO247-3