

## Hybrid CoolSiC<sup>™</sup> IGBT

# TRENCHSTOP<sup>TM</sup> 5 S5 IGBT co-packed with full-rated 6<sup>th</sup> generation CoolSiC<sup>TM</sup> Schottky barrier diode

#### **Features and Benefits:**

- Ultra-low switching losses due to the combination of TRENCHSTOP  $^{\text{TM}}$  5 and CoolSiC  $^{\text{TM}}$  technology as well as the Kelvin emitter pin
- Very low on-state losses
- · Benchmark efficiency in hard switching topologies
- Plug-and-play replacement of pure silicon devices
- Simplified PCB design due to the optimized pin-out of the four-pin package
- Improved wave soldering quality due to the increased clearance of the Kelvin emitter and gate pins
- 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/



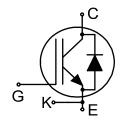
- Industrial Power Supplies
  - Industrial SMPS
  - Industrial UPS
- Energy Generation
  - Solar String Inverter
- Energy Distribution
  - Energy Storage
- Infrastructure Charge
  - Charger

#### **Product Validation:**

Qualified for applications listed above based on the test conditions in the relevant tests of JEDEC20/22

## Package pin definition:

- Pin C & backside collector
- Pin E emitter
- Pin K Kelvin emitter
- Pin G gate













#### **Key Performance and Package Parameters**

Туре	<b>V</b> CE	<b>I</b> c	V <sub>CEsat</sub> , T <sub>vj</sub> =25°C	T <sub>vjmax</sub>	Marking	Package
IKZA50N65SS5	650V	50A	1.35V	175°C	K50ESS5	PG-TO247-4-3

# IKZA50N65SS5



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