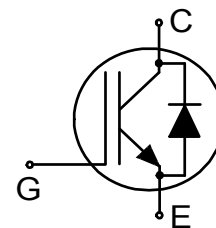


## TRENCHSTOP™ IGBT6

IGBT in trench and field-stop technology with soft, fast recovery anti-parallel Rapid diode

### Features and Benefits:

- Very low  $V_{CE(sat)}$  1.5V (typ.)
  - Maximum junction temperature 175°C
  - Short circuit withstand time 3μs
- Trench and field-stop technology for 650V applications offers :
- very tight parameter distribution
  - high ruggedness, temperature stable behavior
  - low  $V_{CEsat}$  and positive temperature coefficient
- Low gate charge  $Q_G$
  - Pb-free lead plating; RoHS compliant
  - Very soft, fast recovery anti-parallel Rapid diode
  - Complete product spectrum and PSpice Models:  
[www.infineon.com/igbt](http://www.infineon.com/igbt)



### Potential Applications:

Drives

- GPD (general purpose drives)

Major home appliances

- Air conditioning
- Other major home appliances

Small home appliances

- Other small home appliances

### Product Validation:

Qualified for industrial applications according to the relevant tests of JEDEC47/20/22



### Key Performance and Package Parameters

Type	$V_{CE}$	$I_C$	$V_{CEsat}, T_{vj}=25^{\circ}C$	$T_{vjmax}$	Marking	Package
IKA10N65ET6	650V	10A	1.5V	175°C	K10EET6	PG-TO220-3 FP

### 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