

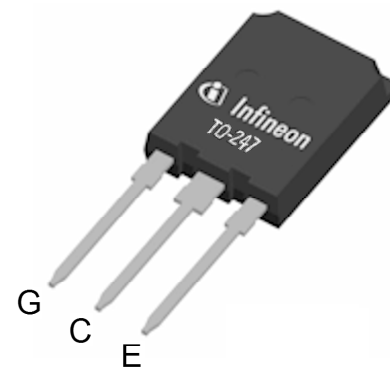
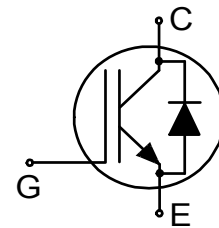
High speed switching series third generation IGBT

Low switching losses IGBT in Highspeed3 technology copacked with soft, fast recovery full current rated anti-parallel Emitter Controlled diode

**Features:**

High speed H3 technology offers:

- High efficiency in hard switching and resonant topologies
- 10µsec short circuit withstand time at  $T_{vj}=175^{\circ}\text{C}$
- Easy paralleling capability due to positive temperature coefficient in  $V_{CEsat}$
- Low EMI
- Low Gate Charge  $Q_G$
- Very soft, fast recovery full current anti-parallel diode
- Maximum junction temperature  $T_{vjmax}=175^{\circ}\text{C}$
- Pb-free lead plating; RoHS compliant
- Complete product spectrum and PSpice Models:  
<http://www.infineon.com/igbt/>



**Applications:**

- Industrial UPS
- Charger
- Energy Storage
- Three-level Solar String Inverter
- Welding

**Product Validation:**

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



**Key Performance and Package Parameters**

Type	$V_{CE}$	$I_C$	$V_{CEsat}, T_{vj}=25^{\circ}\text{C}$	$T_{vjmax}$	Marking	Package
IKQ40N120CH3	1200V	40A	2V	175°C	K40MCH3	PG-TO247-3-46

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