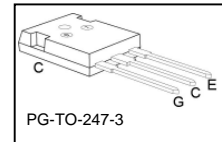
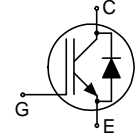


Low Loss DuoPack : IGBT in **TrenchStop®** and Fieldstop technology with soft, fast recovery anti-parallel Emitter Controlled HE diode

- Approx. 1.0V reduced  $V_{CE(sat)}$  and 0.5V reduced  $V_F$  compared to BUP305D
- Short circuit withstand time – 10 $\mu$ s
- Designed for :
  - Frequency Converters
  - Uninterrupted Power Supply
- **TrenchStop®** and Fieldstop technology for 1200 V applications offers :
  - very tight parameter distribution
  - high ruggedness, temperature stable behavior
- NPT technology offers easy parallel switching capability due to positive temperature coefficient in  $V_{CE(sat)}$
- Low EMI
- Low Gate Charge
- Very soft, fast recovery anti-parallel Emitter Controlled HE diode
- Qualified according to JEDEC<sup>1</sup> for target applications
- Pb-free lead plating; RoHS compliant
- Complete product spectrum and PSpice Models : <http://www.infineon.com/igbt/>



Type	$V_{CE}$	$I_C$	$V_{CE(sat), T_j=25^\circ C}$	$T_{j,max}$	Marking Code	Package
IKW08T120	1200V	8A	1.7V	150°C	K08T120	PG-TO-247-3

**Maximum Ratings**

Parameter	Symbol	Value	Unit
Collector-emitter voltage	$V_{CE}$	1200	V
DC collector current $T_C = 25^\circ C$ $T_C = 100^\circ C$	$I_C$	16 8	A
Pulsed collector current, $t_p$ limited by $T_{j,max}$	$I_{C,puls}$	24	
Turn off safe operating area $V_{CE} \leq 1200V, T_j \leq 150^\circ C$	-	24	
Diode forward current $T_C = 25^\circ C$ $T_C = 100^\circ C$	$I_F$	16 8	
Diode pulsed current, $t_p$ limited by $T_{j,max}$	$I_{F,puls}$	24	
Gate-emitter voltage	$V_{GE}$	$\pm 20$	V
Short circuit withstand time <sup>2)</sup> $V_{GE} = 15V, V_{CC} \leq 1200V, T_j \leq 150^\circ C$	$t_{SC}$	10	$\mu s$
Power dissipation $T_C = 25^\circ C$	$P_{tot}$	70	W
Operating junction temperature	$T_j$	-40...+150	$^\circ C$
Storage temperature	$T_{stg}$	-55...+150	

<sup>1</sup> J-STD-020 and JESD-022

<sup>2)</sup> Allowed number of short circuits: <1000; time between short circuits: >1s.



TrenchStop® Series

IKW08T120

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Soldering temperature, 1.6mm (0.063 in.) from case for 10s	-	260	
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