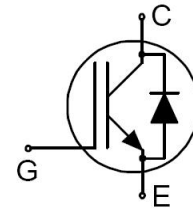


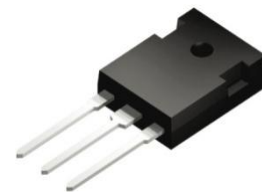
600V , 40A , Trench-FS IGBT

Features

- ◆ Advanced Trench+FS (Field Stop) IGBT technology
- ◆ Low Collector-Emitter Saturation voltage, typical data is 1.75V @ 40A.
- ◆ Easy parallel switching capability due to positive Temperature coefficient in Vce.
- ◆ 10uS short-circuit
- ◆ Fast switching
- ◆ High input impedance
- ◆ Pb- Free product



Schematic Diagram



TO-247

Applications

- ◆ Welding
- ◆ General general-purpose inverter
- ◆ Motor control
- ◆ Intelligent power module.

Electrical characteristics(T_J = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Units	Min.	Typ.	Max.
V _{(BR)CES}	Collector - Emitter breakdown voltage	V _{GE} = 0V, I _D =250uA	V	600	—	—
V _{CE(sat)}	Collector-Emitter Saturation voltage	V _{GE} =15V, I _C =40A,T _C =25°C	V	—	1.75	2.3
		V _{GE} =15V, I _C =40A,T _C =125°C	V	—	1.95	—
V _{GE(th)}	Gate threshold voltage	V _{GE} = V _{CE} , I _C = 0.25 mA	V	4.0	5.2	6.5
V _f	Diode forward voltage	I _F =40A	V	—	1.5	1.8
I _{GES}	Gate to Emitter Forward Leakage	V _{ge} =+30V	nA	—	—	200
I _{GESR}	Gate to Emitter reverse Leakage	V _{ge} =-30V		-200	—	—
I _{CES}	Zero gate voltage collector current	V _{CE} =600V	uA	—	—	25