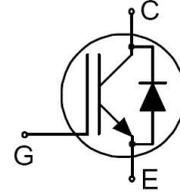


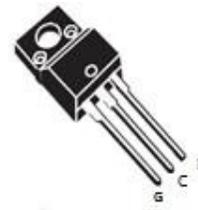
600V , 20A , Trench-FS IGBT

Features

- ◆ Advanced Trench+FS (Field Stop) IGBT technology
- ◆ Low Collector-Emitter Saturation voltage, typical data is 1.7V @ 20A.
- ◆ Easy parallel switching capability due to positive Temperature coefficient in V_{ce} .
- ◆ 10uS short-circuit SOA
- ◆ Fast switching
- ◆ High input impedance
- ◆ Pb- Free product



Schematic Diagram



TO-220F

Applications

- ◆ 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	$V_{GE} = 0V, I_D = 250\mu A$	V	600	—	—
$V_{CE(sat)}$	Collector-Emitter Saturation voltage	$V_{GE}=15V, I_C=20A, T_C=25^\circ C$	V	—	1.7	1.95
		$V_{GE}=15V, I_C=20A, T_C=125^\circ C$	V	—	1.95	—
$V_{GE(th)}$	Gate threshold voltage	$V_{GE} = V_{CE}, I_c = 0.25 \text{ mA}$	V	4.0	5.2	6.5
V_F	Diode Forward Voltage	$I_F=20A$	V	—	1.8	2.3
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	$V_{CE} = 600V$	μA	—	—	25