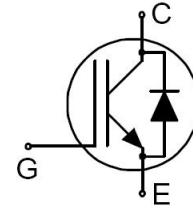


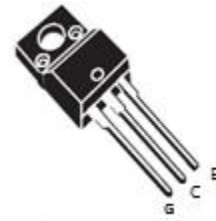
600V , 6A , Trench-FS IGBT

Features

- ◆ Advanced Trench+FS (Field Stop) IGBT technology
- ◆ Low Collector-Emitter Saturation voltage, typical data is 2.1V @ 6A.
- ◆ Easy parallel switching capability due to positive Temperature coefficient in V_{ce} .
- ◆ 10uS Short-Circuit
- ◆ Fast switching
- ◆ High input impedance
- ◆ Pb- Free product



Schematic Diagram



TO-220F

Applications

- ◆ Home applications
- ◆ Intelligent power module.

Electrical characteristics ($T_J = 25^\circ\text{C}$ 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	$V_{GE}=15V, I_C=6A, T_C=25^\circ\text{C}$	V	—	2.1	2.4
		$V_{GE}=15V, I_C=6A, T_C=150^\circ\text{C}$	V	—	2.3	—
$V_{GE(th)}$	Gate threshold voltage	$V_{GE}=V_{CE}, I_c = 0.25mA$	V	4.0	5.4	6.5
V_F	Diode forward voltage	$I_F=6A, T_C=25^\circ\text{C}$	V	—	1.7	2.1
		$I_F=6A, T_C=150^\circ\text{C}$	V	—	1.3	—
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