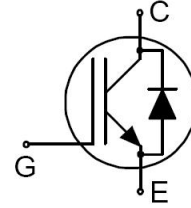


## 600V , 6A , Trench-FS IGBT

### Features

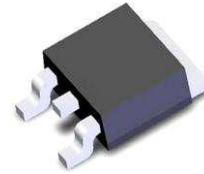
- ◆ Advanced Trench+FS (Field Stop) IGBT technology
- ◆ Low Collector-Emitter Saturation voltage, typical data is 2.1V @ 6A.
- ◆ Easy parallel switching capability due to positive Temperature coefficient in  $V_{ce}$ .
- ◆ 10uS Short-Circuit
- ◆ Fast switching
- ◆ High input impedance
- ◆ Pb- Free product



Schematic Diagram

### Applications

- ◆ Home applications
- ◆ Intelligent power module.



TO-252

### Electrical characteristics(T<sub>J</sub> = 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	$V_{GE}=15V, I_C=6A, T_C=25^\circ C$	V	—	2.1	2.4
		$V_{GE}=15V, I_C=6A, T_C=150^\circ C$	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	$I_F=6A, T_C=25^\circ C$	V	—	1.7	2.1
		$I_F=6A, T_C=150^\circ C$	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	$V_{CE} = 600V$	$\mu A$	—	—	25