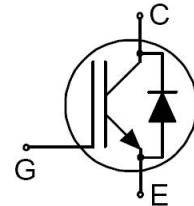
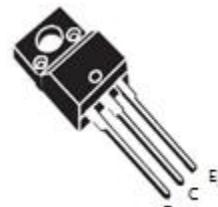


600V , 19A , Trench-FS IGBT**Features**

- Advanced Trench+FS (Field Stop) IGBT technology
- Low Collector-Emitter Saturation voltage, typical data is 1.7V @ 19A.
- 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-220F****Applications**

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

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

Symbol	Parameter	Test conditions	Units	Min.	Typ.	Max.
$V_{(BR)CES}$	Collector - Emitter breakdown voltage	$V_{GE} = 0V, I_C = 250\mu A$	V	600	—	—
$V_{CE(sat)}$	Collector-Emitter Saturation voltage	$V_{GE}=15V, I_C=19A, T_C=25^{\circ}C$	V	—	1.7	2.0
		$V_{GE}=15V, I_C=19A, T_C=125^{\circ}C$	V	—	2.05	—
$V_{GE(th)}$	Gate threshold voltage	$V_{GE} = V_{CE}, I_C = 0.25mA$	V	4.0	5.0	6.5
V_f	Diode forward voltage	$I_F=19A$	V	—	1.6	2.0
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