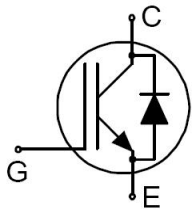
1200V , 40A , Trench-FS IGBT

Features

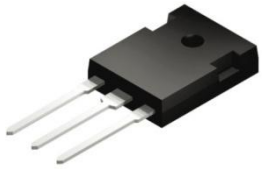
- Advanced Trench +FS (Field Stop) IGBT technology
- Low Collector-Emitter Saturation voltage, typical data is 1.8V @ 40A.
- Short-Circuit withstand time-10uS
- Easy parallel switching capability due to positive Temperature coefficient in Vce.
- Fast switching
- High input impedance
- Pb- Free product



Schematic Diagram

Applications

- General purpose inverters
- Welding
- Motor controls
- Induction Heating
- UPS



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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_D = 0.5mA	V	1200	—	—
$V_{CE(sat)}$	Collector-Emitter Saturation voltage	V_{GE}=15V, I_C=40A,T_C=25°C	V	—	1.8	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_D = 0.4mA	V	4.0	-	6.5
V_F	Diode Forward voltage	Ic=40A	V	—	2.2	2.8
I_{GES}	Gate to Emitter Forward Leakage	Vge=+30V	nA	—	—	200
I_{GESR}	Gate to Emitter reverse Leakage	Vge=-30V		-200	—	—
I_{CES}	Zero gate voltage collector current	V_{CE} =1200V	uA	—	—	100