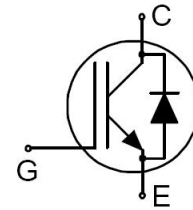


1200V , 40A , Trench-FS IGBT

Features

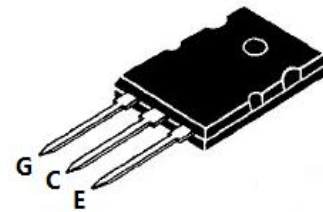
- ◆ Advanced Trench +FS (Field Stop) IGBT technology
- ◆ Low Collector-Emitter Saturation voltage, typical data is 1.8V @ 40A.
- ◆ Short-Circuit withstand time-10uS
- ◆ Easy parallel switching capability due to positive Temperature coefficient in Vce.
- ◆ Fast switching
- ◆ High input impedance
- ◆ Pb-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



Schematic Diagram

Applications

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



TO-264

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 = 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 | 5.2 | 6.5 |
| V _F | Diode Forward voltage | I _C =40A | V | — | 2.9 | 3.6 |
| 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} =1200V | uA | — | — | 100 |