

Product Overview

FGH40T65SHDF: IGBT, 650V, 40A Field Stop Trench

For complete documentation, see the data sheet.

Using novel field stop IGBT technology, Fairchild's new series of field stop 3rd generation IGBTs offer superior conduction and switching performance and easy parallel operation. This device is well suited for the resonant or soft switching application such as induction heating and MWO.

Features

- Maximum Junction Temperature : $T_J = 175^\circ\text{C}$
- Positive Temperature Co-efficient for Easy Parallel Operating
- High Current Capability
- Low Saturation Voltage: $V_{CE(sat)} = 1.45\text{ V (Typ.) @ } I_C = 40\text{ A}$
- 100% of the Parts tested for $I_{LM}(1)$
- High Input Impedance
- Fast Switching
- Tighten Parameter Distribution
- RoHS Compliant

Part Electrical Specifications

| Product | Compliance | Status | $V_{ES}^{(BR)C}$ Typ (V) | I_C Max (A) | $V_{CE(sat)}$ Typ (V) | V_F Typ (V) | E_{off} Typ (mJ) | E_{on} Typ (mJ) | T_{rr} Typ (ns) | I_{rr} Typ (A) | Gate Charge Typ (nC) | Short Circuit Withstand (μs) | E_{AS} Typ (mJ) | P_D Max (W) | Co- Pack aged Diode | Pack age Type |
|-------------------|------------------------|--------|--------------------------------|---------------------|-----------------------------|---------------------|--------------------------|-------------------------|-------------------------|------------------------|-------------------------------|--|-------------------------|---------------------|------------------------------|---------------------|
| FGH40T65SHDF-F155 | Pb-free Halide free | Active | 650 | | | 1.5 | 0.44 | 1.22 | | - | 68 | - | - | 268 | | TO-247-3 |

For more information please contact your local sales support at www.onsemi.com.

Created on: 2/21/2019