

## Product Overview

### FGA50T65SHD: IGBT, 650 V, 50 A Field Stop Trench

For complete documentation, see the data sheet.

Using novel field stop IGBT technology, Fairchild's new series of field stop 3<sup>rd</sup> generation IGBTs offer the optimum performance for solar inverter, UPS, welder, telecom, ESS and PFC applications where low conduction and switching losses are essential.

### Features

- Maximum Junction Temperature :  $T_J = 175^\circ\text{C}$
- Positive Temperature Co-efficient for Easy Parallel Operating
- High Current Capability
- Low Saturation Voltage:  $V_{CE(sat)} = 1.6 \text{ V(Typ.) @ } I_C = 50 \text{ A}$
- 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)	$V_{GE(sat)}$ 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 ( $\mu\text{s}$ )	$E_{AS}$ Typ (mJ)	$P_D$ Max (W)	Co-Pack aged Diode	Package Type
FGA50T65SHD	Pb-free Halide free	Active	650	50	1.6	2.3	0.384	1.28	197	-	87	-	-	319	Yes	TO-3P-3L

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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