

## Product Overview

### FGA40N65SMD: IGBT, 650V, 40A, Field Stop

For complete documentation, see the data sheet.

Using novel field stop IGBT technology, Fairchild's new series of field stop 2<sup>nd</sup> generation IGBTs offer the optimum performance for solar inverter, UPS, welder, induction heating, telecom, ESS and PFC applications where low conduction and switching losses are essential.

### Features

- Maximum junction temperature :  $T_J = 175\text{ }^\circ\text{C}$
- Positive temperature co-efficient for easy parallel operating
- High current capability
- Low saturation voltage:  $V_{CE(sat)} = 1.9\text{V(Typ.) @ } I_C = 40\text{A}$
- Fast switching:  $E_{OFF} = 6.5\mu\text{J/A}$
- Tightened parameter distribution
- RoHS compliant

### Applications

- Energy Generation & Distribution
- Uninterruptible Power Supply
- Other Industrial

### 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 ( $\mu\text{s}$ )	$E_{AS}$ Typ (mJ)	$P_D$ Max (W)	Co-Pack aged Diode	Pack age Type
FGA40N65SMD	Pb-free	Active	650	40	1.9	2.1	0.26	0.34	200	3.6	119	-	-	349	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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