

UG4SC075005L8S

Silicon Carbide (SiC) Combo JFET - EliteSiC, 5.0 mohm, 750V, TOLL

Product Overview

For complete documentation, see the data sheet.

The UG4SC075005L8S "Combo-JFET" integrates both a 750V SiC JFET and a Low Voltage Si MOSFET into a single TOLL package. This innovative approach allows users to create circuitry that would enable a normally-off switch while leveraging the benefits of a normally-on SiC JFET. These benefits include ultra-low on-resistance ($R_{DS(on)}$) to minimize conduction losses and the exceptional robustness characteristic of a simplified JFET device structure, making it capable of handling the high-energy switching required in circuit protection applications. For switch-mode power conversion application, this device provides separate access to the JFET and MOSFET gates for improved speed control and ease of paralleling multiple devices.

Features

- Single digit $R_{DS(on)}$
- Normally-off capability
- Improved speed control
- Improved parallel device operation (3+FETs)
- Operating temperature: 175°C (max)
- High pulse current capability
- Excellent device robustness
- Silver-sintered die attach for excellent thermal resistance
- short circuit rated


Applications

- Solid State / Semiconductor Circuit Breaker
- Solid state / Semiconductor Relay
- Battery Disconnects
- Surge Protection
- Inrush Current Control

End Products

- Circuit Breaker
- Battery Charger
- Solar
- Energy Storage System
- Industrial Power Supply

Part Electrical Specifications

Product	Status	Compliance	VDS(max) (V)	$I_{D(peak)}$ (A)	Typical $R_{DS(on)}$	Packa ge	Qg (nC)	Output capac itance Coss (pF)	Packa ge Type	Case Outlin e	MSL Type	MSL Temp (°C)	Conta iner Type	Conta iner Qty.
UG4SC075005L8S	Active		750	588	5	TOLL	164	362	H-PDSO-F8 9.90x10.38x2.30 1.20P	740AA.PDF	1	255	REEL	2000