Product Overview

IRL640A: Power MOSFET, N-Channel, Logic Level, A-FET, 200 V, 18 A, 180 mΩ , TO-220

For complete documentation, see the data sheet.

These N-Channel enhancement mode power field effect transistors are produced using Fairchild's proprietary, planar, DMOS technology. This advanced technology has been especially tailored to minimize on-state resistance, provide superior switching performance, and withstand high energy pulse in the avalanche and commutation mode. These devices are well suited for high efficiency switching DC/DC converters, switch mode power supplies, DC-AC converters for uninterrupted power supply and motor control.

Features

- 18 A, 200 V
  $r_{DS(ON)}$ = 180 mΩ @ V_{GS} = 5 V
- Low Gate Charge (Typ. 40 nC)
- Low C_{rss} (Typ. 95 pF)
- Fast Switching Speed
- 100% Avalanche Tested
- Improved dv/dt Capability
- Logic-Level Gate Drive

Applications

- Other Audio & Video

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	$V_{(BR)DSS}$ Min (V)	V_{GS} Max (V)	$V_{GS(th)}$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(on)}$ Max @ V_{GS} = 2.5 V (mΩ)	$R_{DS(on)}$ Max @ V_{GS} = 4.5 V (mΩ)	$R_{DS(on)}$ Max @ V_{GS} = 10 V (mΩ)	Q_g Typ @ V_{GS} = 4.5 V (nC)	Q_g Typ @ V_{GS} = 10 V (nC)	C_{iss} Typ (pF)	Package Type
IRL640A	Pb-free	Active	N-Channel	Single	200	±20	2	18	110	-	180	-	-	40	1310	TO-220-3

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

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