

FQA90N15

Power MOSFET, N-Channel, QFET®, 150V, 90A, 18mΩ, TO-3P

Product Overview

For complete documentation, see the data sheet.

This N-Channel enhancement mode power MOSFET is produced using a proprietary planar stripe and DMOS technology. This advanced MOSFET technology has been especially tailored to reduce on-state resistance, and to provide superior switching performance and high avalanche energy strength. These devices are suitable for switched mode power supplies, active power factor correction (PFC), and electronic lamp ballasts.

Features

- 90A, 150V, $R_{DS(on)} = 0.018\Omega$ (Max.) @ $V_{GS} = 10\text{ V}$, $I_D = 45\text{ A}$
- Low gate charge (Typ. 220nC)
- Low C_{rss} (Typ. 200pF)
- 100% avalanche tested
- 175°C maximum junction temperature rating

Applications

- AC-DC Merchant Power Supply - Servers & Workstations
- Workstation
- Server & Mainframe
- Desktop PC
- AC-DC Merchant Power Supply - Desktop PC

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	$V_{DS}^{(BR)}$ Min (V)	V_{GS}^{Max} (V)	$V_{GS}^{(th)Max}$ (V)	I_D^{Max} (A)	P_D^{Max} (W)	$R_{DS(on)Max}$ @ $V_{GS} = 2.5\text{ V}$ (mΩ)	$R_{DS(on)Max}$ @ $V_{GS} = 4.5\text{ V}$ (mΩ)	$R_{DS(on)Max}$ @ $V_{GS} = 10\text{ V}$ (mΩ)	Q_g^{Typ} @ $V_{GS} = 4.5\text{ V}$ (nC)	Q_g^{Typ} @ $V_{GS} = 10\text{ V}$ (nC)	C_{iss}^{Typ} (pF)	Package Type
FQA90N15	4.8816		Active	N-Channel	Single	150	±25	4	90	375	-	-	18	-	220	6700	TO-3P-3L