

FDC610PZ

P-Channel PowerTrench[®] MOSFET, -30V, -4.9A, 42mΩ

Product Overview

For complete documentation, see the data sheet.

This Channel MOSFET is produced using an advanced PowerTrench[®] process that has been especially tailored to minimize the on state resistance and yet maintain low gate charge for superior switching performance. These devices are well suited for battery power applications: load switching and power management, battery charging circuits, and DC/DC conversion.

Features

- Max $r_{DS(on)}$ = 42mΩ at $V_{GS} = -10V$, $I_D = -4.9A$
- Max $r_{DS(on)}$ = 75mΩ at $V_{GS} = -4.5V$, $I_D = -3.7A$
- Low gate charge (17nC typical).
- High performance trench technology for extremely low $r_{DS(on)}$.
- SuperSOT[™]-6 package: small footprint (72% smaller than standard SO-8) low profile (1mm thick).
- RoHS compliant

Applications

- This product is general usage and suitable for many different applications.

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 @ $V_{GS} = 2.5V$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 4.5V$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 10V$ (mΩ)	Q_g Typ @ $V_{GS} = 4.5V$ (nC)	Q_g Typ @ $V_{GS} = 10V$ (nC)	C_{iss} Typ (pF)	Package Type
FDC610PZ	0.1729		Active	P-Channel	Single	-30	25	-3	-4.9	1.6	-	75	42	10.5	9	755	TSOT-23-6