

Product Overview

FCP7N60: Power MOSFET, N-Channel, SUPERFET[®], Easy Drive, 600 V, 7 A, 600 mΩ, TO-220

For complete documentation, see the data sheet.

SuperFET[®] MOSFET is the first generation of high voltage super-junction (SJ) MOSFET family that is utilizing charge balance technology for outstanding low on-resistance and lower gate charge performance. This technology is tailored to minimize conduction loss, provide superior switching performance, dv/dt rate and higher avalanche energy. Consequently, SuperFET MOSFET is very suitable for the switching power applications such as PFC, server/telecom power, FPD TV power, ATX power and industrial power applications.

Features

- 650V @T_J = 150°C
- Typ. R_{DS(on)} = 530mΩ
- Ultra low gate charge (Typ. Q_g = 23nC)
- Low effective output capacitance (Typ. C_{oss,eff} = 60pF)
- 100% avalanche tested
- RoHS compliant

Applications

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

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	V _{SS} (BRD) 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
FCP7N60	Pb-free	Active	N-Channel	Single	600	±30	5	7	83	-	-	600	-	23	710	TO-220-3

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

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