Dual N-Channel 60-V (D-S) MOSFET

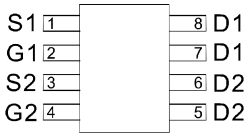
General Description

The B6020S is the Dual N-Channel logic enhancement mode power field effect transistors to provide excellent R_{DS}(on), low gate charge and low gate resistance. It's up to 60V operation voltage is well suited in switching mode power supply, SMPS, notebook computer power management and other battery powered circuits.

Features

- **$R_{DS(ON)}$=90mΩ@V_{GS}=10V (N-Ch)**
- **$R_{DS(ON)}$=120mΩ@V_{GS}=4.5V (N-Ch)**
- **Super high density cell design for extremely low $R_{DS(ON)}$**
- **Exceptional on-resistance and maximum DC current**
- **SOP-8 Package**

Pin Configuration



Applications

- Switching power supply, SMPS
- Battery Powered System
- DC/DC Converter
- DC/AC Converter
- Load Switch

Absolute Maximum Ratings (TA=25℃ Unless Otherwise Noted):

Parameter		Symbol	Maximum		Unit
Drain-Source Voltage		V_{DSS}	60		V
Gate-Source Voltage		V_{GSS}	±20		V
Continuous Drain Current(tJ=150℃)	TA=25℃	I_D	4		A
	TA=70℃		3.5		
Pulsed Drain Current		I_{DM}	30		A
Maximum Power Dissipation*	TA=25℃	P_D	2.0		W
	TA=70℃		1.3		
Operating Junction & Storage Temperature Range		T_J	-55 to 150		℃
Thermal Resistance-Junction to Ambient* (T≦10 sec)		RθJA	50	62.5	℃/W

*The device mounted on 1in2 FR4 board with 2 oz copper