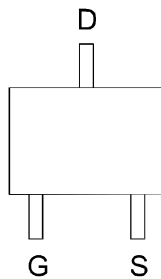


N-Channel 60-V (D-S) MOSFET

General Description

The B6010K is the N-Channel logic enhancement mode power field effect transistors are produced using high cell density, DMOS trench technology. This high density process is especially tailored to minimize on-state resistance. These devices are particularly suited for low voltage application such as cellular phone and notebook computer power management and other battery powered circuits where high-side switching and low in-line power loss are needed in a very small outline surface mount package.

Pin Configuration



Features

- $R_{DS(ON)}=90m\Omega@V_{GS}=10V$
- $R_{DS(ON)}=120m\Omega@V_{GS}=4.5V$
- Super High Density Cell Design for Extremely Low $R_{DS(ON)}$
- Exceptional On-Resistance and Maximum DC Current
- SOP-8 Package

Applications

- Power Management in Note book
- Portable Equipment
- Battery Powered System
- DC/DC Converter
- Load Switch
- DSC

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

Parameter		Symbol	N-Channel	Unit
Drain-Source Voltage		V_{DSS}	60	V
Gate-Source Voltage		V_{GSS}	± 20	V
Continuous Drain Current (tJ=150°C)	TA=25°C	I_D	3	A
	TA=70°C		2.3	
Pulsed Drain Current		I_{DM}	30	A
Continuous Source Current (Diode Conduction)		I_S	1.7	A
Maximum Power Dissipation	TA=25°C	P_D	2.0	W
	TA=70°C		1.44	
Operating Junction Temperature		T_J	-55 to 150	°C
Thermal Resistance-Junction to Case		$R_{\theta JC}$	48	°C/W