Dual P-Channel 30V (D-S) MOSFET

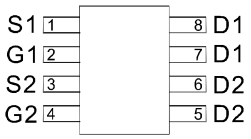
General Description

The B4953 is the Dual P-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.

Features

- **-30V/-5.3A, $R_{DS(ON)}$=60mΩ@V_{GS}=-10V**
- **-30V/-4.2A, $R_{DS(ON)}$=90mΩ@V_{GS}=-4.5V**
- **Super High Density Cell Design for Extremely Low $R_{DS(ON)}$**
- **Exceptional On-Resistance and Maximum DC Current Capability**
- **SOP-8 Package**

Pin Configuration



Applications

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

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

Parameter		Symbol	Limit		Unit
Drain-Source Voltage		V_{DSS}	-30		V
Gate-Source Voltage		V_{GSS}	±20		V
Continuous Drain Current(tJ=150℃)	TA=25℃	I_D	-5.3		A
	TA=70℃		-4.3		
Pulsed Drain Current		I_{DM}	-30		A
Continuous Source Current (Diode Conduction)		I_S	-1.7		A
Maximum Power Dissipation	TA=25℃	P_D	2.0		W
	TA=70℃		1.3		
Operating Junction Temperature		T_J	-55 to 150		℃
Storage Temperature Range		Tstg	-55 to 150		℃
Thermal Resistance-Junction to Ambient*		RθJA	T≦10 sec	47	℃/W
			Steady State	75	
Thermal Resistance-Junction to Case		RθJC	45		℃/W