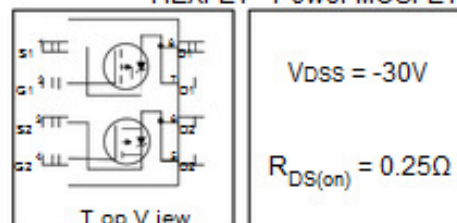


HEXFET® Power MOSFET

- Generation V Technology
- Ultra Low On-Resistance
- Dual P-Channel MOSFET
- Surface Mount
- Very Low Gate Charge and Switching Losses
- Fully Avalanche Rated



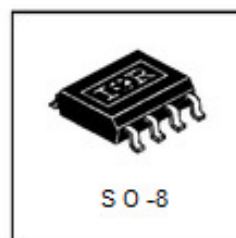
$$V_{DS} = -30V$$

$$R_{DS(on)} = 0.25\Omega$$

Description

Fifth Generation HEXFETs from International Rectifier utilize advanced processing techniques to achieve extremely low on-resistance per silicon area. This benefit, combined with the fast switching speed and ruggedized device design that HEXFET Power MOSFETs are well known for, provides the designer with an extremely efficient and reliable device for use in a wide variety of applications.

Recommended upgrade: IRF7306 or IRF7316
Lower profile/smaller equivalent: IRF7506



SO-8

The SO-8 has been modified through a customized leadframe for enhanced thermal characteristics and multiple-die capability making it ideal in a variety of power applications. With these improvements, multiple devices can be used in an application with dramatically reduced board space. The package is designed for vapor phase, infra red, or wave soldering techniques.

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ Unless Otherwise Noted)

	Symbol	Maximum	Units
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	-2.3	A
		-1.8	
Pulsed Drain Current	I_{DM}	-10	A
Continuous Source Current (Diode Conduction)	I_S	1.6	A
		2.0	
Maximum Power Dissipation	P_D	1.3	W
		2.0	
Single Pulse Avalanche Energy	E_{AS}	57	mJ
Avalanche Current	I_{AR}	-1.3	A
Repetitive Avalanche Energy	E_{AR}	0.20	mJ
Peak Diode Recovery dI/dt	dI/dt	-5.0	V/ns
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Thermal Resistance Ratings

Parameter	Symbol	Limit	Units
Maximum Junction-to-Ambient	R_{JA}	62.5	$^\circ\text{C/W}$