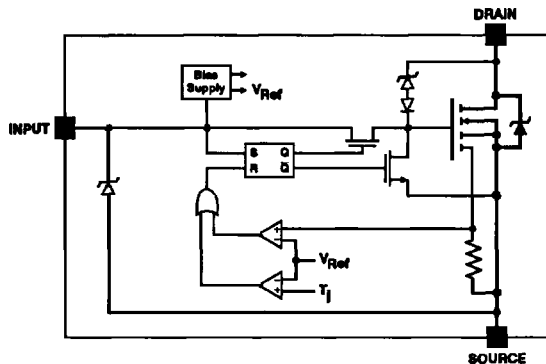


### SmartFET™ Transistor

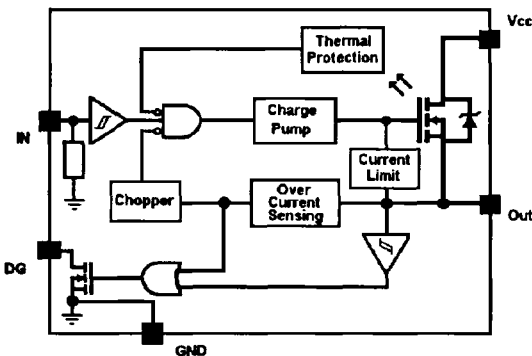


#### Features

- Extremely rugged for harsh operating environment
- Over-temperature protection
- Over-current protection
- Active drain to source clamp
- ESD protection
- Logic level input threshold
- Compatible with standard POWER MOSFET
- Monolithic construction

Part Number	Continuous Operating Voltage	Shutdown Current	Over Temperature Shutdown	Clamp Voltage (typ.)	On Resistance (max.)	Turn-On Time	Turn-Off Time	Case Outline P10*
	V <sub>ds, max.</sub> (V)	I <sub>ds(isd), min.</sub> (A)	T <sub>j(isd), typ.</sub> (°C)	V <sub>ds, clamp</sub> (V)	R <sub>ds (on)</sub> (Ω)	typ. (μs)	typ. (μs)	TO-220
IRSF3010	50	11	165	55	0.080	2.4	1.2	
IRSF3011	50	5	165	55	0.200	0.8	0.5	

### High Side Protected DMOS Switch



#### Features

- High negative output clamp voltage
- Avalanche rated output power DMOS
- Over-temperature protection
- PWM current limit for short circuit protection
- ESD protection
- Open circuit detection in off-state
- Diagnostic feedback
- LSTTL/CMOS compatible logic input

Part Number	Continuous Operating Voltage	Current Limit	Over Temperature Shutdown	Clamp Voltage (typ.)	On Resistance (max.)	Turn-On Time	Turn-Off Time	Case Outline P9*
	V <sub>ds, max.</sub> (V)	I <sub>LIM, min.</sub> (A)	T <sub>j(isd), typ.</sub> (°C)	V <sub>ds, clamp</sub> (V)	R <sub>ds (on)</sub> (Ω)	typ. (μs)	typ. (μs)	TO-220 5 lead
IR6000	35	4	175	72	0.100	100	140	
IR6001	35	12	175	72	0.100	100	140	

\* Other packages available - consult factory.  
For case outline drawings see page O-2.