

N Channel Power MOSFET with low $R_{DS(on)}$

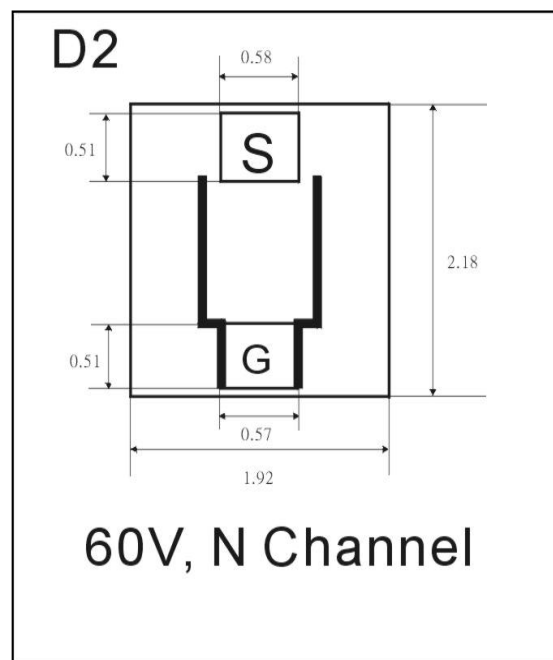
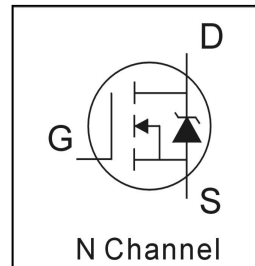
Chip Specification

General Description:

- * Advanced Process Technology
- * Dynamic dV/dt Rating
- * 175°C Operating Temperature
- * Fast Switching
- * Fully Avalanche Rated
- * Low $R_{DS(on)}$

Mechanical Data:

D2	
Dimension	1.92mm x 2.18mm
Thickness:	400 μm
Metallization:	
Top :	Al
Backside :	CrNiAg / Au
Suggested Bonding Conditions:	
Die Mounting:	Solder Perform
	95/5 PbSn or 92.5/2.5/5 PbAgIn
Source Bonding Wire:	5 mil Al



Absolute Maximum Rating

@ $T_a=25^{\circ}\text{C}$

Characteristics	Symbol	Limit	Unit	Test Conditions
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	60	V	$V_{GS}=0V, I_D=250\mu A$
Static Drain-to - Source On-resistance	$R_{DS(ON)}$	0.2	Ω	$V_{GS}=10V, I_D=6A$
Continuous Drain current (in target package)	$I_D@25^{\circ}\text{C}$	10	A	$V_{GS}=10V$
Continuous Drain current (in target package)	$I_D@100^{\circ}\text{C}$	7.2	A	$V_{GS}=10V$
Operation Junction	T_j	-55~175	$^{\circ}\text{C}$	
Storage Temperature	T_{STR}	-55~175	$^{\circ}\text{C}$	

Target Device: IRFZ14

TO-220AB

 P_D

43

W

@ $T_c=25^{\circ}\text{C}$