

### **INCHANGE SEMICONDUCTOR**

## isc N-Channel MOSFET Transistor

## **IRFP350R**

### FEATURES

- Drain Current –I\_D= 16A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-
  - : V<sub>DSS</sub>= 400V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)}$  = 0.3  $\Omega$  (Max)
- Fast Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### DESCRIPTION

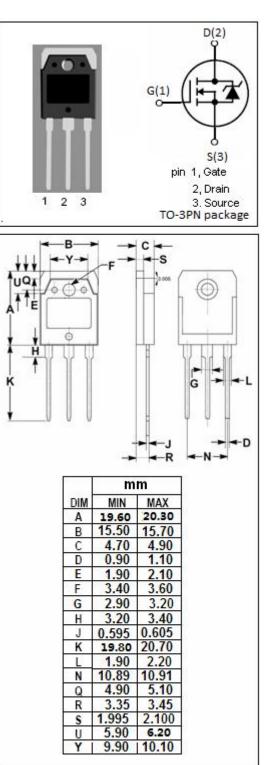
• Designed for use in switch mode power supplies and general purpose applications.

SYMBOL	PARAMETER	VALUE	UNIT		
V <sub>DSS</sub>	Drain-Source Voltage	400	V		
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V		
ID	Drain Current-Continuous	15	А		
Ідм	Drain Current-Single Pluse	60	А		
PD	Total Dissipation @T <sub>c</sub> =25°C	150	W		
TJ	Max. Operating Junction Temperature -55~15		°C		
T <sub>stg</sub>	Storage Temperature	-55~150	°C		

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.7	°C/W
R <sub>th j-a</sub>	Thermal Resistance, Junction to Ambient	30	°C/W





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### **ELECTRICAL CHARACTERISTICS**

#### $T_{\text{C}}\text{=}25^{\circ}\!\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V(BR)DSS	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	400		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2	4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 8A		0.3	Ω
lgss	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 400V; V <sub>GS</sub> = 0		250	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 15A; V <sub>GS</sub> = 0		1.6	V

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