

# isc N-Channel MOSFET Transistor

# IRFP340R

### **FEATURES**

- Drain Current –I<sub>D</sub>= 10A@ T<sub>C</sub>=25 °C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 400V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 0.55 \Omega (Max)$
- · Fast Switching
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



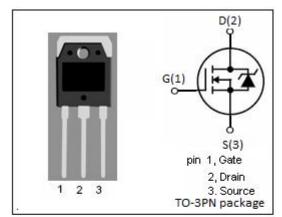
• Designed for use in switch mode power supplies and general purpose applications.

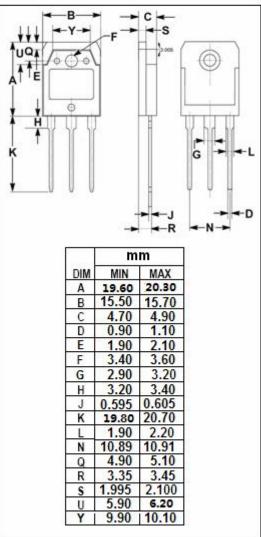
### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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SYMBOL	PARAMETER	VALUE	UNIT				
V <sub>DSS</sub>	Drain-Source Voltage	400	V				
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V				
I <sub>D</sub>	Drain Current-Continuous	10	А				
І <sub>рм</sub>	Drain Current-Single Pluse	40	Α				
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	125	W				
TJ	Max. Operating Junction Temperature	-55~150	$^{\circ}$				
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$				

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.83	°C/W
R <sub>th j-a</sub>	R <sub>th j-a</sub> Thermal Resistance, Junction to Ambient		°C/W







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#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	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	$V_{DS}$ = $V_{GS}$ ; $I_D$ = 0.25mA	2	4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 5A		0.55	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	μА
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 10A; V <sub>GS</sub> = 0		2.0	V

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