

# isc N-Channel MOSFET Transistor

## PSMN2R6-60PS

### FEATURES

- Drain Current –I\_D= 150A@ T\_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage : V<sub>DSS</sub>= 60V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 2.6m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

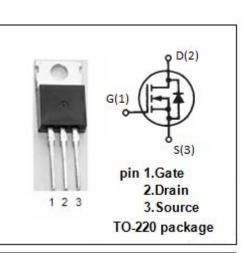
• Designed for use in switch mode power supplies and general purpose applications.

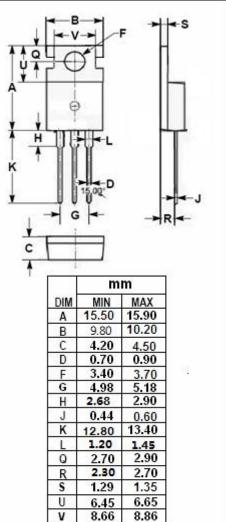
ABSOLUTE MAXIMUM RATINGS(Ta=25 C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V <sub>DSS</sub>	Drain-Source Voltage	60	v			
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V			
ID	Drain Current-Continuous	150	A			
I <sub>DM</sub>	Drain Current-Single Pluse	961	A			
P <sub>D</sub>	Total Dissipation @Tc=25℃	326	w			
TJ	Max. Operating Junction Temperature	Temperature -55~175				
T <sub>stg</sub>	Storage Temperature	-55~175	°C			

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.46	°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 <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	60		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 1mA	2.4	4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 25A		2.6	mΩ
Igss	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA
loss	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0		1.0	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 25A; V <sub>GS</sub> = 0		1.2	V

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