

## isc N-Channel MOSFET Transistor

## **R6511ENX**

#### FEATURES

- Drain Current –I\_D= 11A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V<sub>DSS</sub>=650V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 400m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### DESCRIPTION

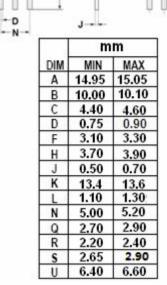
• Designed for use in switch mode power supplies and general purpose applications.

ABSOLUTE WAXIWUW RATINGS(Ta=25 C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V <sub>DSS</sub>	Drain-Source Voltage	650	V			
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V			
ID	Drain Current-Continuous	11	А			
I <sub>DM</sub>	Drain Current-Single Pluse	33	А			
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25℃	53	W			
TJ	Max. Operating Junction Temperature -55~150		°C			
T <sub>stg</sub>	Storage Temperature -55~150		°C			

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

# pin 1.Gate 2.Drain 3.Source TO-220F package

F



#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.4	°C/W	

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#### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ 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> = 1mA	650		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =230uA	2	4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =3.8A		400	mΩ
I <sub>GSS</sub>	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> = 650V; V <sub>GS</sub> = 0 V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0@T <sub>J</sub> =125°C		100 1000	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 11A; V <sub>GS</sub> = 0		1.5	V

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