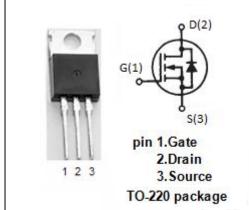


# isc N-Channel MOSFET Transistor

2SK2927

#### **FEATURES**

- Drain Current –I<sub>D</sub>= 10A@ T<sub>C</sub>=25°C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 60V(Min)
- · Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 75m \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



### **DESCRIPTION**

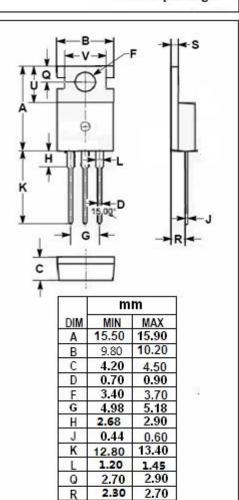
• Designed for use in switch mode power supplies and general purpose applications.

## 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			
Ι <sub>D</sub>	Drain Current-Continuous	10	Α			
I <sub>DM</sub>	Drain Current-Single Pluse	40	А			
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25°C	30	W			
TJ	Max. Operating Junction Temperature -55~150		$^{\circ}$			
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$			

## THERMAL CHARACTERISTICS

	SYMBOL	YMBOL PARAMETER		UNIT
R <sub>th j-c</sub>		Thermal Resistance, Junction to Case	4.2	°C/W



1.29

6.45 8.66 1.35 6.65

S



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### **ELECTRICAL CHARACTERISTICS**

Tc=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> = 10mA	60		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	$V_{DS}$ = $V_{GS}$ ; $I_D$ = 1mA	1.5	2.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 5A		75	m Ω
Igss	Gate-Body Leakage Current	V <sub>GS</sub> = ±16V;V <sub>DS</sub> = 0		±10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0		10	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 10A; V <sub>GS</sub> = 0		1.5	V

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