

# isc N-Channel MOSFET Transistor

## 2SK1570

#### **DESCRIPTION**

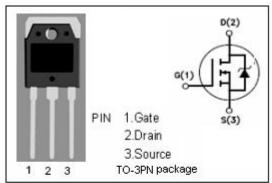
- Drain Current –I<sub>D</sub>=12A@ T<sub>C</sub>=25°C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>=450 (Min)
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation

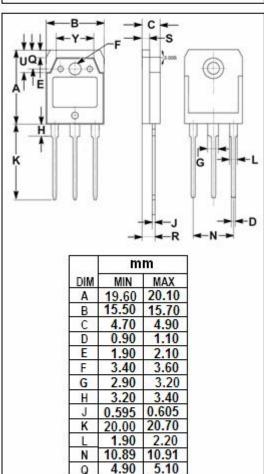


· Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.



SYMBOL	ARAMETER	VALUE	UNI T	
$V_{DSS}$	Drain-Source Voltage (V <sub>GS</sub> =0)	450	V	
$V_{GS}$	Gate-Source Voltage	±30		
I <sub>D</sub>	Drain Current-continuous@ TC=25°C	25℃ 12		
P <sub>tot</sub>	Total Dissipation@TC=25℃	150		
Tj	Max. Operating Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$	





Q

R

3.35

2.100

1.995

5.90 9.90 10.10



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### • ELECTRICAL CHARACTERISTICS (Tc=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	450			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =0; I <sub>D</sub> =1mA	2.0	3.0	4.0	V
R <sub>DS(on)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =6A			0.75	Ω
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =450V; V <sub>GS</sub> = 0			500	uA



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