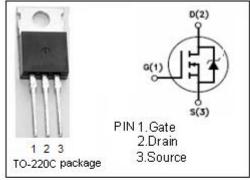


# isc N-Channel MOSFET Transistor

2SK961

#### **DESCRIPTION**

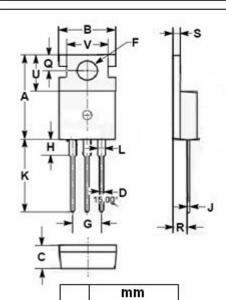
- Drain Current –I<sub>D</sub>=3A@ T<sub>C</sub>=25 °C
- Drain Source Voltage-
- : V<sub>DSS</sub>=900V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation





#### **APPLICATIONS**

 Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS,AC and DC motor controls, relay and solenoid drivers.



### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage (V <sub>GS</sub> =0)	900	V
$V_{GS}$	Gate-Source Voltage		٧
I <sub>D</sub>	Drain Current-continuous@ TC=25℃ 3		Α
P <sub>tot</sub>	Total Dissipation@TC=25℃ 80		W
Tj	Max. Operating Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}\!\mathbb{C}$

	mm		
DIM	MIN	MAX	
Α	15.50	15.90	
В	9.80	10.20	
O	4.20	4.50	
D	0.70	0.90	
F	3.40	3.70	
G	4.98	5.18	
Н	2.68	2.90	
J	0.44	0.60	
K	12.80	13.40	
L	1.20	1.45	
0	2.70	2.90	
R	2.30	2.70	
S	1.29	1.35	
U	6.45	6.65	
V	8.66	8.86	



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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
(BR)DSS	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 1mA	900			V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 10mA	2.1	3.0	4.0	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =1.5A		3.5	5.0	Ω
I <sub>GSS</sub>	Gate Source 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> =900V; V <sub>GS</sub> = 0			500	uA
ton	Turn-on time	V <sub>GS</sub> =10V;I <sub>D</sub> =2A;		60	90	ns
toff	Turn-off time	R <sub>L</sub> =50 Ω		210	340	ns
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> =3A; V <sub>GS</sub> =0		1.0	1.35	V



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