

# isc N-Channel MOSFET Transistor

2SK954

#### **DESCRIPTION**

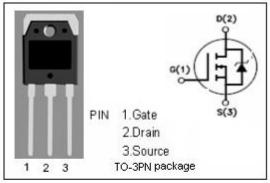
- Drain Current –I<sub>D</sub>=3A@ T<sub>C</sub>=25 °C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>=800V(Min)
- · Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

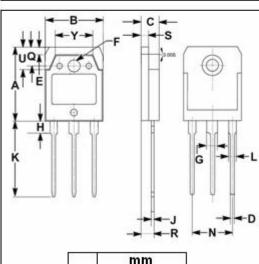
### **APPLICATIONS**

- Designed especially for high voltage.
- · high speed power switching.



SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	800	V
V <sub>GS</sub>	Gate-Source Voltage	±20	V
I <sub>D</sub>	Drain Current-continuous@ TC=25℃	3	Α
P <sub>tot</sub>	Total Dissipation@TC=25℃	25℃ 100	
T <sub>j</sub>	Max. Operating Junction Temperature	80	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range -55~150		$^{\circ}$





	mm		
DIM	MIN	MAX	
Α	19.60	20.10	
В	15.50	15.70	
C	4.70	4.90	
D	0.90	1.10	
E	1.90	2.10	
F	3.40	3.60	
G	2.90	3.20	
Н	3.20	3.40	
J	0.595	0.605	
K	20.00	20.70	
L	1.90	2.20	
N	10.89	10.91	
Q	4.90	5.10	
R	3.35	3.45	
S	1.995	2.100	
U	5.90	6.10	
Y	9.90	10.10	



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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	800			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			3.0	4.0	Ω
I <sub>GSS</sub>	Gate Source Leakage Current $V_{GS} = \pm 20V; V_{DS} = 0$				±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =800V; V <sub>GS</sub> = 0			500	uA
ton	Turn-on time	V <sub>GS</sub> =10V;I <sub>D</sub> =2.1A;		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		1.00	1.35	V



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