

# isc N-Channel MOSFET Transistor

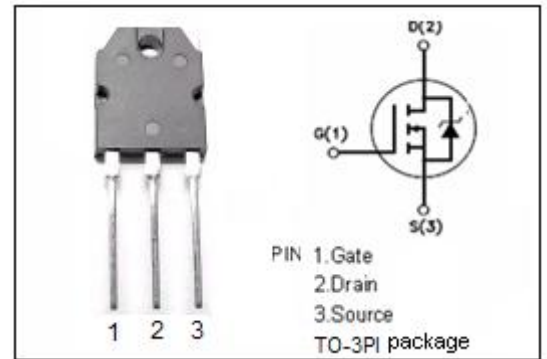
# 2SK538

### DESCRIPTION

- Drain Current  $-I_D=3A@ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}=900V(\text{Min})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

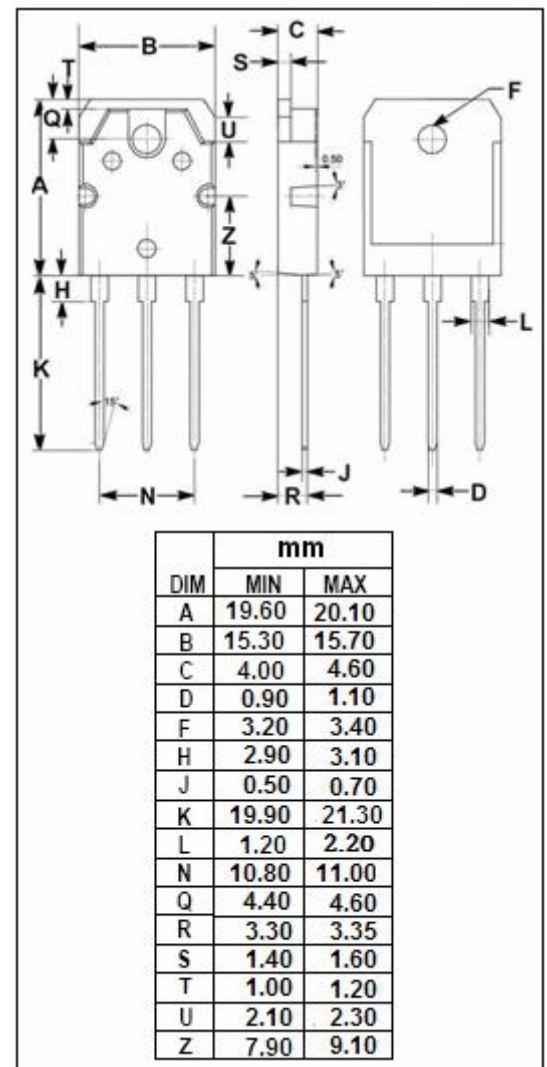
### APPLICATIONS

- 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( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	900	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $TC=25^\circ C$	3	A
$P_{tot}$	Total Dissipation@ $TC=25^\circ C$	100	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



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• ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=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	900			V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	1.5		3.5	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =1.5A			4.5	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			300	μA

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