

# isc N-Channel MOSFET Transistor

## 2SK560

### DESCRIPTION

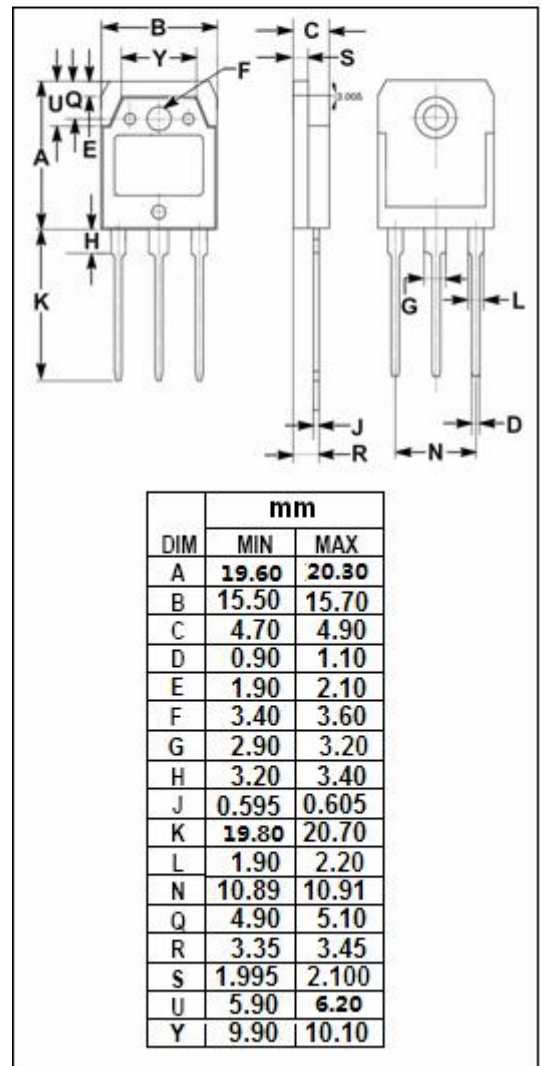
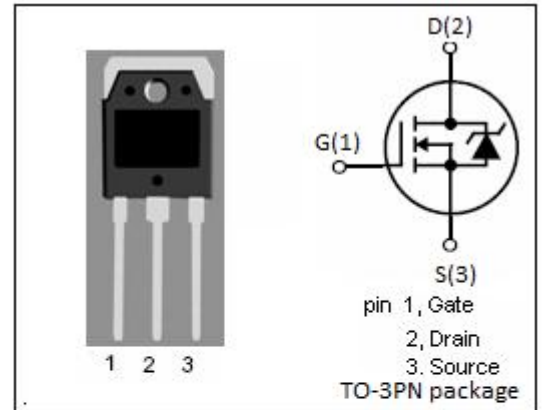
- Drain Current  $-I_D=15A@ T_C=25^{\circ}C$
- Drain Source Voltage-  
:  $V_{DSS}=500V(\text{Min})$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### 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	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	500	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $TC=25^{\circ}C$	15	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	$^{\circ}C$



**isc N-Channel Mosfet Transistor****2SK560****• 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	500			V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	2.0		4.0	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =8A			0.4	Ω
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> = 15A; V <sub>GS</sub> =0		1.2		V
I <sub>GSS</sub>	Gate Source 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> =400V; V <sub>GS</sub> = 0			250	uA

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