

**iscN-Channel MOSFET Transistor**
**2SK1509**
**FEATURES**

- Drain Current  $-I_D=20A @ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}=100V(\text{Min})$
- Static Drain-Source On-Resistance  
:  $R_{DS(on)}=0.08 \Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**DESCRIPTION**

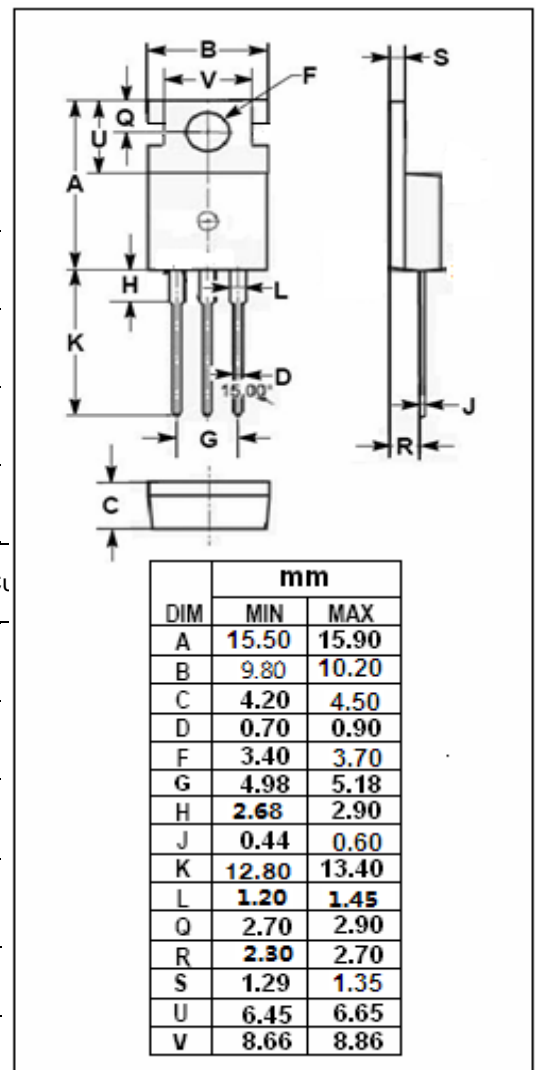
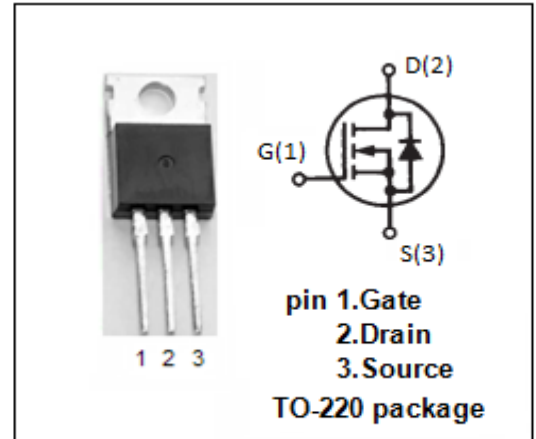
- The 2SK1492 is N-channel MOS Field Effect Transistor De-signed for high voltage switching applications

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	100	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 20$	V
$I_D$	Drain Current-Continuous	20	A
$I_{DM}$	Drain Current-Single Pluse	80	Drain Cu
$P_D$	Total Dissipation @ $T_C=25^\circ C$	60	W
$T_J$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.08	$^\circ C/W$



## isc N-Channel MOSFET Transistor

2SK1509

## ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0V; I <sub>D</sub> =1 mA	100	--	V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	1	2.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 10A	--	0.08	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0	--	±10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =100V; V <sub>GS</sub> = 0	--	500	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 20A; V <sub>GS</sub> = 0	--	1.89	V

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