

isc N-Channel MOSFET Transistor

2SK893

DESCRIPTION

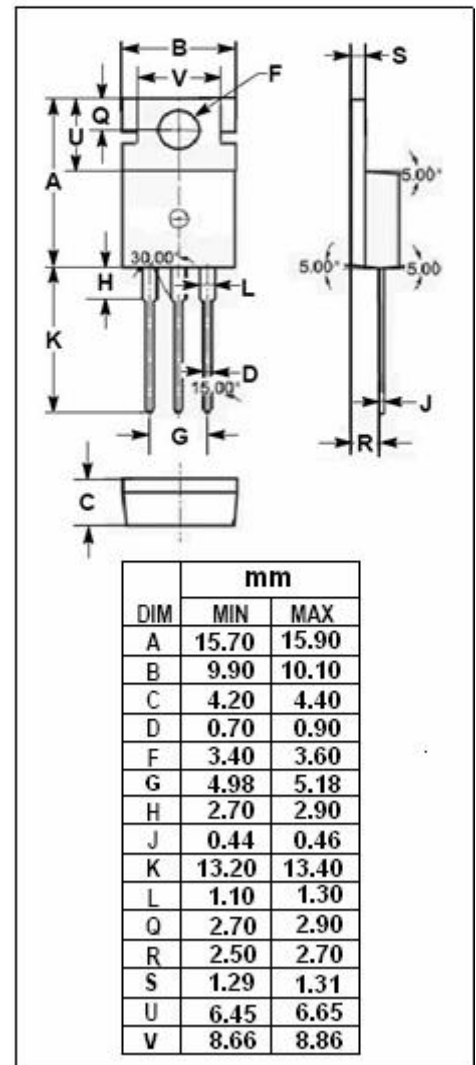
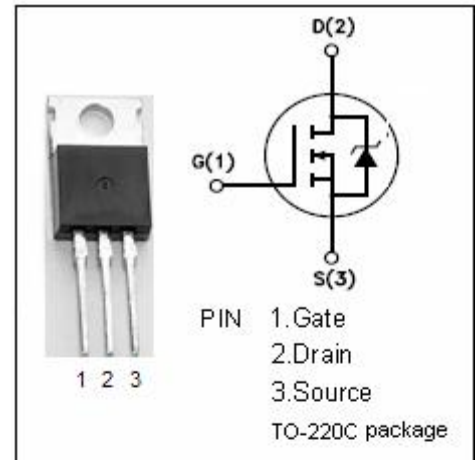
- Drain Current  $-I_D=5A @ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}=500V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- High voltage.
- high speed power Switching.

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@ $T_C=25^\circ C$	5	A
$P_{tot}$	Total Dissipation@ $T_C=25^\circ C$	75	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



## isc N-Channel Mosfet Transistor

2SK893

• 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	1.5		3.5	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =2.5A		1.3	1.5	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> =500V; V <sub>GS</sub> = 0			300	uA
tr	Rise time	V <sub>GS</sub> =10V; I <sub>D</sub> =2.5A; R <sub>L</sub> =90 Ω		15	30	ns
ton	Turn-on time			30	60	ns
tf	Fall time			15	30	ns
toff	Turn-off time			40	85	ns
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> =5A; V <sub>GS</sub> =0			2.0	V