

isc N-Channel MOSFET Transistor

2SK382

DESCRIPTION

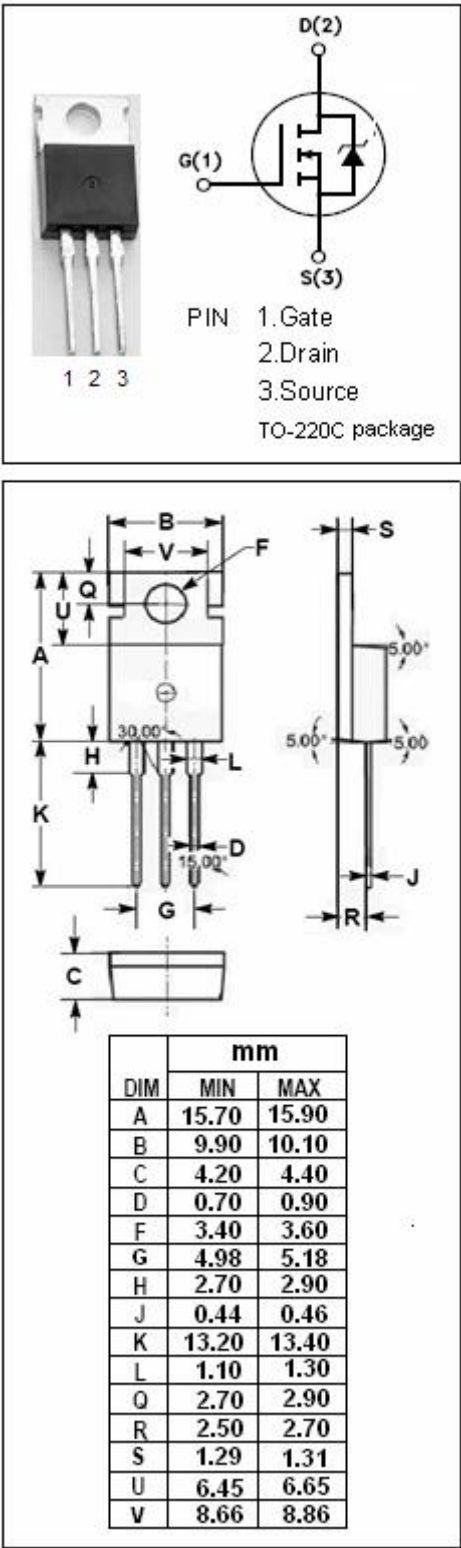
- Drain Current  $-I_D=2A @ T_C=25^{\circ}C$
- Drain Source Voltage-  
:  $V_{DSS}= 500V(Min)$
- Fast Switching Speed

APPLICATIONS

- High speed switching.
- High Cutoff frequency.
- No secondary breakdown.
- Suitable for switching regulator, DC-DC converter, RF amplifiers, and ultrasonic power oscillators.

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@ $TC=25^{\circ}C$	2	A
$P_{tot}$	Total Dissipation@ $TC=25^{\circ}C$	30	W
$T_j$	Max. Operating Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



**isc N-Channel Mosfet Transistor****2SK382****• 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 <sub>GS</sub> ; I <sub>D</sub> = 1mA	2.0		5.0	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 15V; I <sub>D</sub> = 1A		2.5	4.0	Ω
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0			±1	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =400V; V <sub>GS</sub> = 0			1	mA
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> = 1A; V <sub>GS</sub> = 0		0.8		V
t <sub>r</sub>	Rise time	V <sub>GS</sub> =15V; I <sub>D</sub> =2A; R <sub>L</sub> =15 Ω		18		ns
t <sub>on</sub>	Turn-on time			25		ns
t <sub>f</sub>	Fall time			25		ns
t <sub>off</sub>	Turn-off time			70		ns