

isc N-Channel MOSFET Transistor

2SK1612

DESCRIPTION

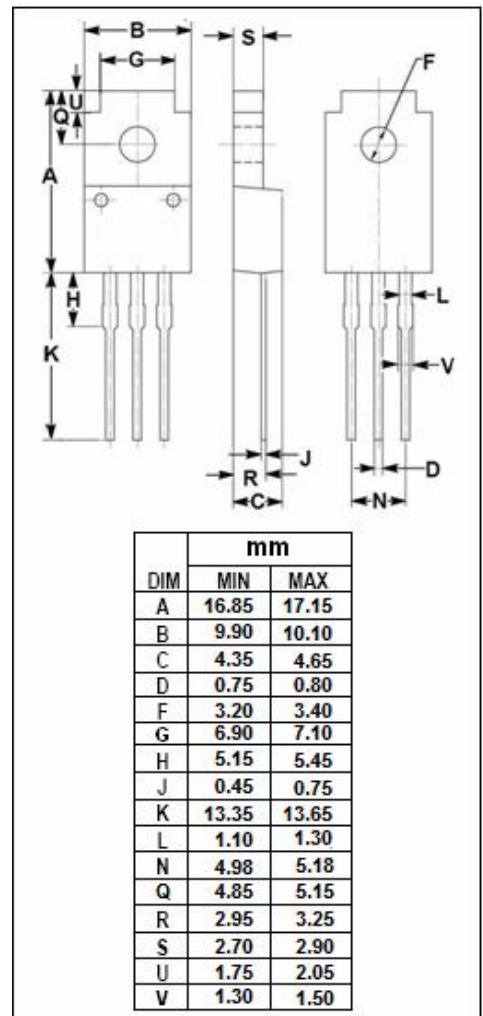
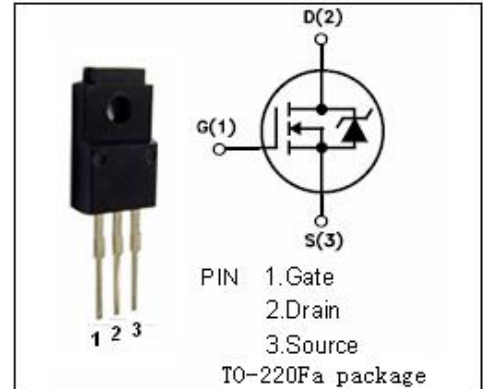
- Drain Current  $-I_D=3A @ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}=900V(\text{Min})$

APPLICATIONS

- Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.

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

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	900	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-continuous@ $T_C=25^\circ C$	3	A
$P_{tot}$	Total Dissipation@ $T_C=25^\circ C$	50	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



## isc N-Channel Mosfet Transistor

2SK1612

• ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=1\text{mA}$	900			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=25\text{V}; I_D=1\text{mA}$	1.0		5.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	$V_{GS}=10\text{V}; I_D=2\text{A}$		3.8	5.0	$\Omega$
$I_{GSS}$	Gate Source Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}= 0$			$\pm 1$	$\mu\text{A}$
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=720\text{V}; V_{GS}= 0$			100	$\mu\text{A}$
$t_{on}$	Turn-on time	$V_{GS}=10\text{V}; I_D=2\text{A}; R_L=100\ \Omega$		40		ns
$t_{off}$	Turn-off time			140		ns