

isc N-Channel MOSFET Transistor

2SK1142

DESCRIPTION

- Drain Current  $-I_D=2A @ T_C=25^{\circ}C$
- Drain Source Voltage-  
:  $V_{DSS}=800V(Min)$

APPLICATIONS

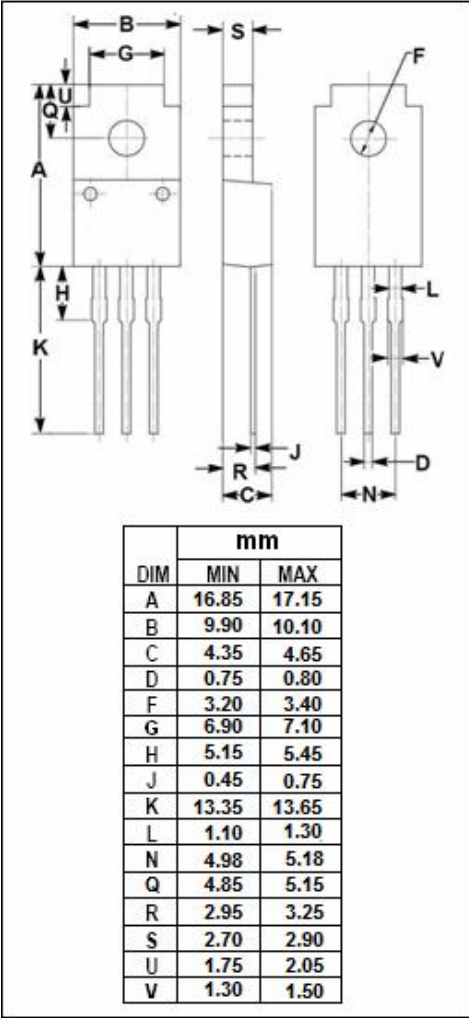
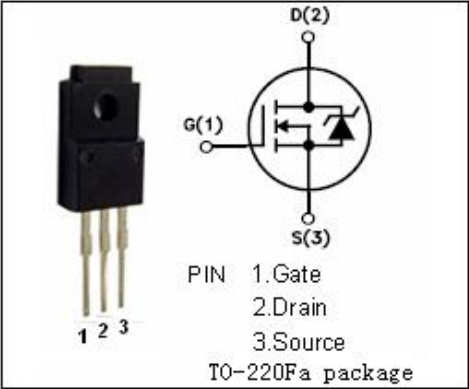
- Designed for high voltage, high speed power switching

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

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	800	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $TC=25^{\circ}C$	2	A
$P_{tot}$	Total Dissipation@ $TC=25^{\circ}C$	35	W
$T_j$	Max. Operating Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	0.83	$^{\circ}C/W$
$R_{th\ j-a}$	Thermal Resistance,Junction to Ambient	35	$^{\circ}C/W$



**isc N-Channel Mosfet Transistor****2SK1142****• 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	800			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =0; 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> =1A			5.0	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> =800V; V <sub>GS</sub> = 0			500	uA