

isc N-Channel MOSFET Transistor

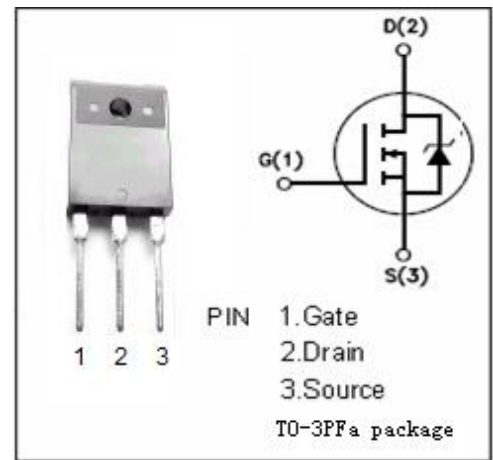
2SK630

FEATURES

- Drain Current $-I_D=5A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 160V(\text{Min})$

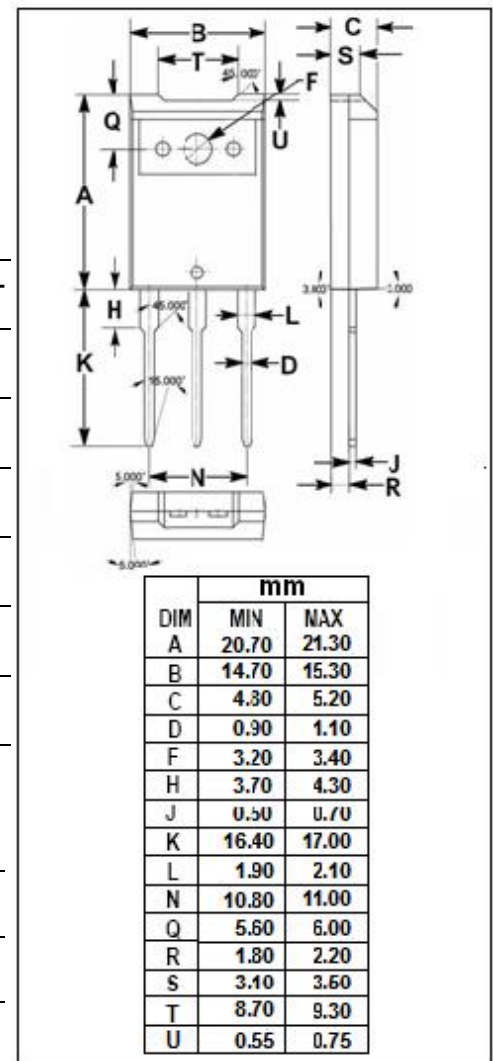
DESCRIPTION

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



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	160	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	5	A
P_D	Total Dissipation @ $T_C=25^\circ C$	40	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	1.25	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$

isc N-Channel MOSFET Transistor**2SK630****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=1\text{mA}$	160			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=1\text{mA}$	1.0		5.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=15\text{V}; I_D=3\text{A}$			0.5	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=120\text{V}; V_{GS}=0$			1	μA