

isc N-Channel MOSFET Transistor

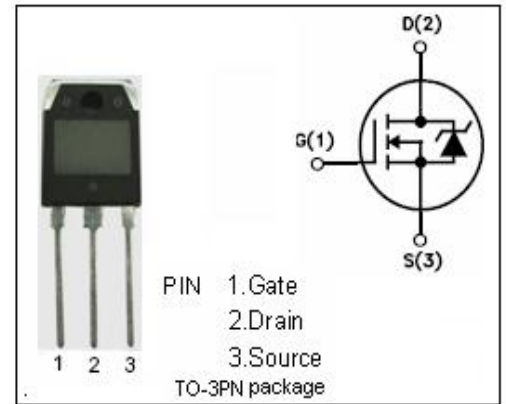
2SK745

FEATURES

- Drain Current $-I_D=20A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 50V(\text{Min})$

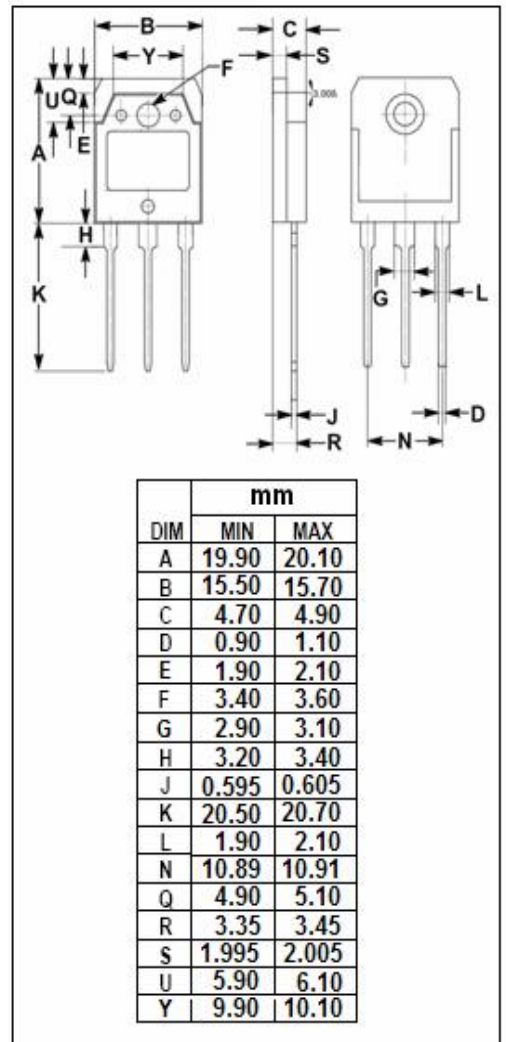
DESCRIPTION

- Designed for use in switch mode power supplies and general purpose applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	50	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	20	A
P_D	Total Dissipation @ $T_C=25^\circ C$	100	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$



isc N-Channel MOSFET Transistor**2SK745****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	$V_{GS}=0; I_D=10\text{mA}$	50			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10V_{GS}; I_D=1\text{mA}$	2.1		4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=10\text{A}$			0.055	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	$V_{DS}=50\text{V}; V_{GS}=0$			1	μA
V_{SD}	Forward On-Voltage	$I_S=20\text{A}; V_{GS}=0$		1.8	2.2	V