

isc N-Channel MOSFET Transistor

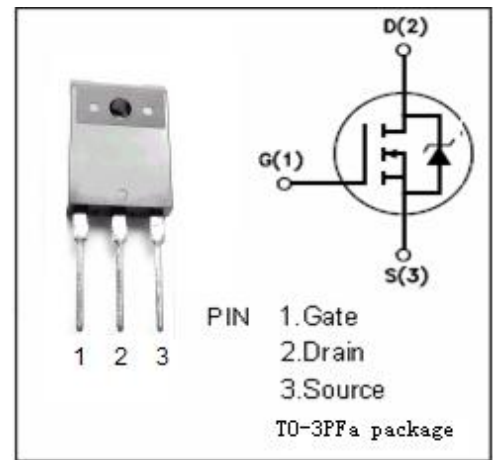
2SK604

FEATURES

- Drain Current $-I_D=5A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 800V(\text{Min})$
- Fast Switching Speed

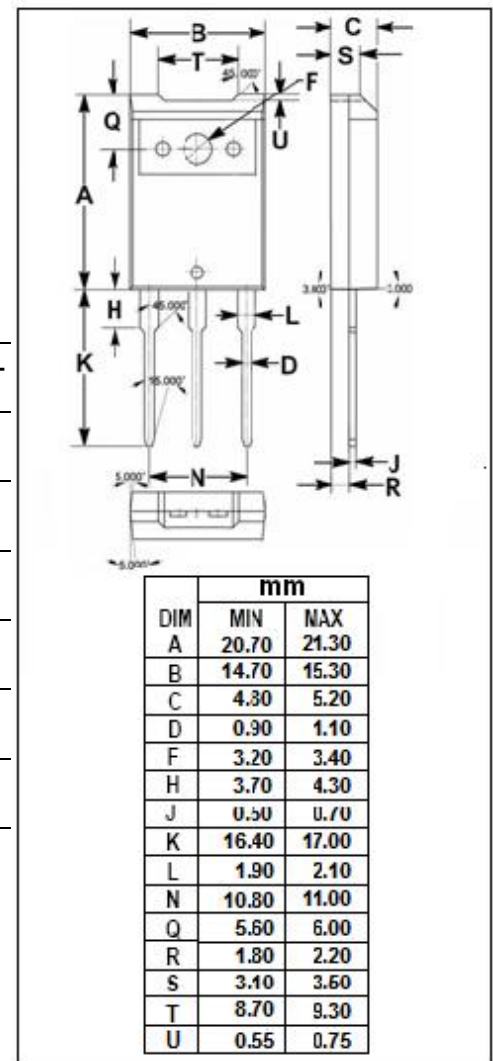
DESCRIPTION

- Designed especially for high voltage,high speed applications, such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	800	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	5	A
P_D	Total Dissipation @ $T_C=25^\circ C$	80	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$



isc N-Channel MOSFET Transistor**2SK604****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	$V_{GS}=0; I_D=1\text{mA}$	800			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	$V_{GS}=15\text{V}; I_D=5\text{A}$			3.5	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	$V_{DS}=640\text{V}; V_{GS}=0$			1	μA
V_{SD}	Forward On-Voltage	$I_S=5\text{A}; V_{GS}=0$			1.4	V
t_r	Rise time	$V_{GS}=10\text{V}; I_D=3\text{A};$ $R_L=50\Omega$		130	200	ns
t_{on}	Turn-on time			155	240	ns
t_f	Fall time			130	175	ns
t_{off}	Turn-off time			530	705	ns