

isc N-Channel MOSFET Transistor

2SK1607

DESCRIPTION

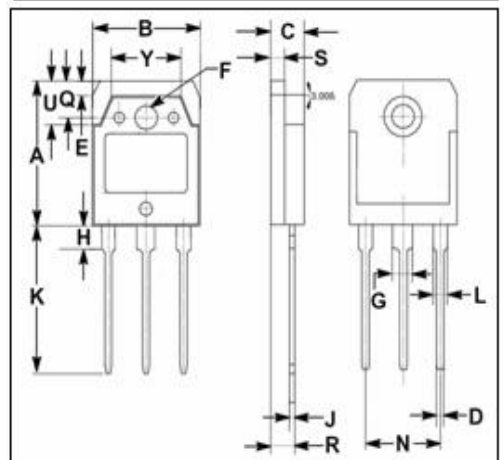
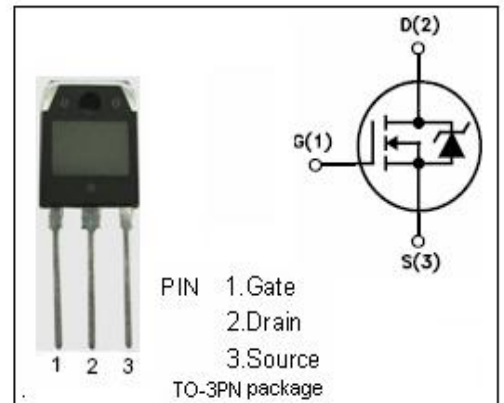
- Drain Current $-I_D=13A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}=450V(\text{Min})$

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 ($V_{GS}=0$)	450	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $TC=25^\circ C$	13	A
P_{tot}	Total Dissipation@ $TC=25^\circ C$	120	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=1\text{mA}$	450			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	$V_{GS}=10\text{V}; I_D=7\text{A}$		0.34	0.45	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}= 0$			± 1	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=360\text{V}; V_{GS}= 0$			100	μA
t_{on}	Turn-on time	$V_{GS}=10\text{V}; I_D=7\text{A}; R_L=21.4\ \Omega$		110		ns
t_{off}	Turn-off time			320		ns