

isc N-Channel MOSFET Transistor

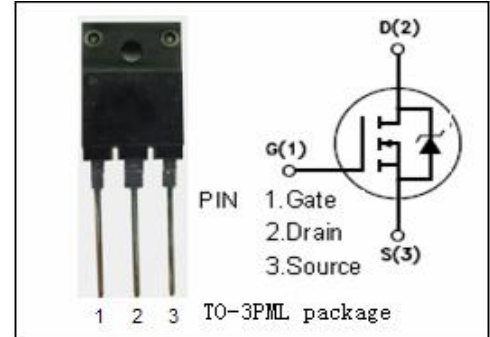
2SK1652

DESCRIPTION

- Drain Current $-I_D=13A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}=500$ (Min)

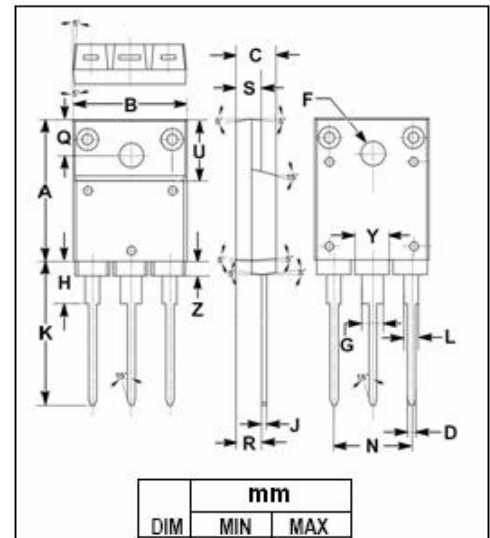
APPLICATIONS

- high voltage,high speed 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 ($V_{GS}=0$)	500	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C=25^\circ C$	13	A
P_{tot}	Total Dissipation@ $T_C=25^\circ C$	85	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	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
θ_{j-c}	Thermal Resistance,Junction to Case	1.25	$^\circ C/W$
θ_{j-a}	Thermal Resistance,Junction to Ambient	35.0	$^\circ C/W$

isc N-Channel Mosfet Transistor**2SK1652****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	500			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =10V; I _D =1mA	2.0	3.0	4.0	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D =7A			0.45	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±25V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =500V; V _{GS} = 0			500	uA
V _{SD}	Diode Forward Voltage	I _F =13A; V _{GS} =0			2.0	V