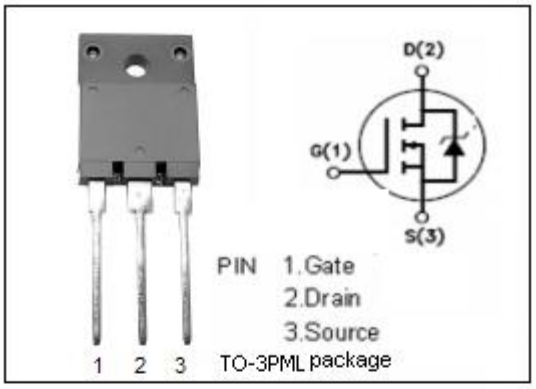
isc N-Channel MOSFET Transistor 2SK1652



DESCRIPTION

- Drain Current –I_D=13A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=500 (Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

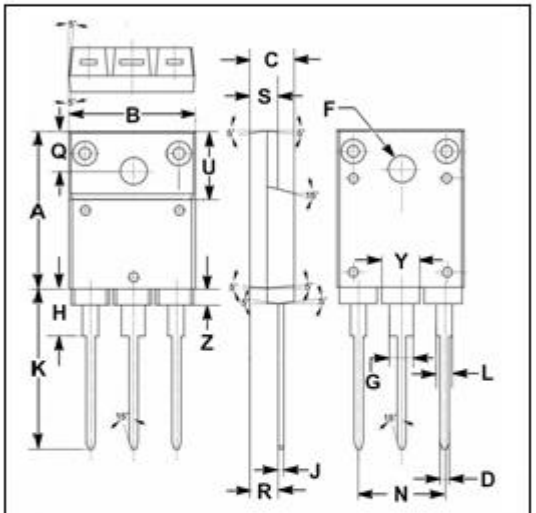
- high voltage,high speed applications, such as switching regulators, converters, solenoid and relay drivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	500	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	13	A
P_{tot}	Total Dissipation@TC=25℃	85	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
th j-c	Thermal Resistance,Junction to Case	1.25	℃/W
th j-a	Thermal Resistance,Junction to Ambient	35.0	℃/W



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

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

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