

isc N-Channel MOSFET Transistor

2SK1250

FEATURES

- Drain Current $-I_D=15A@ T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}=500V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)}=0.7\ \Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

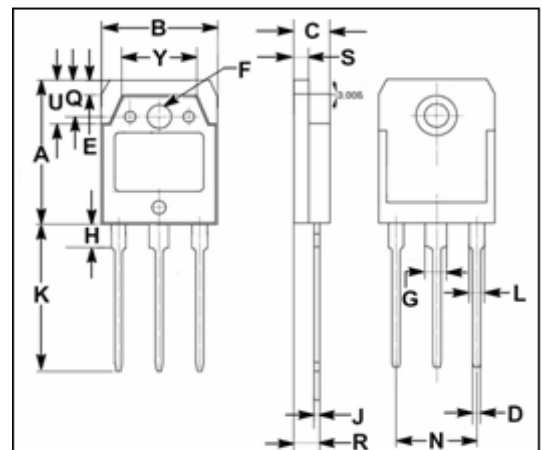
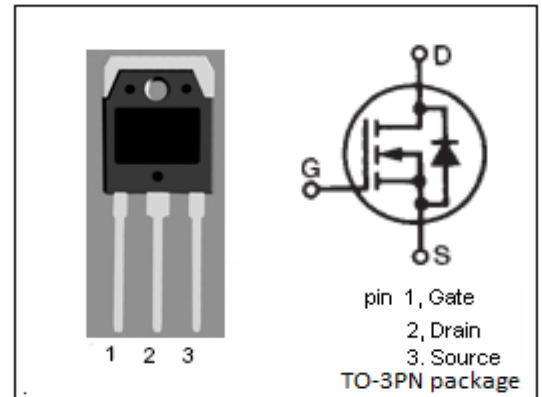
- motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	500	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	20	A
I_{DM}	Drain Current-Single Pluse	60	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	150	W
T_J	Max. Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^{\circ}C/W$



DIM	mm	
	MIN	MAX
A	19.60	20.30
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	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 1mA	500	--	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	2	4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 10A	--	0.35	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0	--	±0.1	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 500V; V _{GS} = 0	--	250	uA
V _{SD}	Forward On-Voltage	I _S = 10A; V _{GS} = 0	--	1.5	V

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