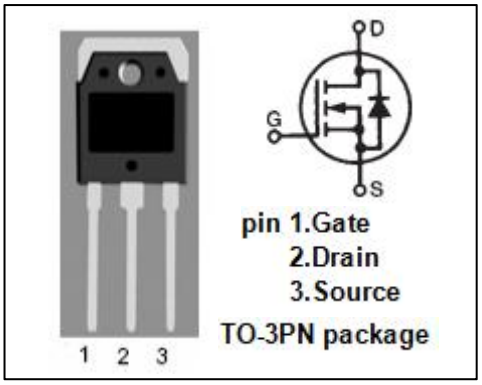
isc N-Channel MOSFET Transistor 2SK948

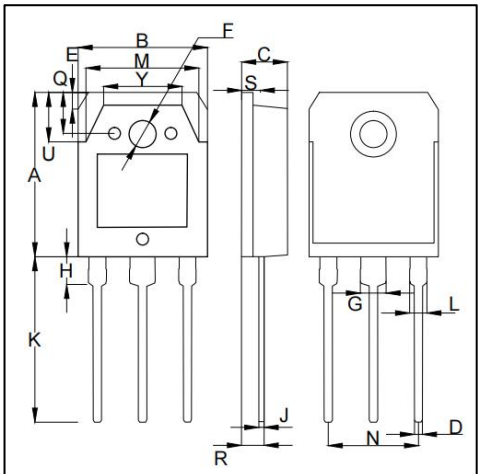


FEATURES

- Drain Current : I_D= 12A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 250V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.3Ω (Max) @ V_{GS}= 10V
- 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.



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.30	15.90
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
M	13.30	13.90
N	10.89	10.91
Q	4.25	5.10
R	3.30	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	250	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous	12	A
I_{DM}	Drain Current-Single Pluse	48	A
P_D	Total Dissipation @T_C=25℃	100	W
T_J	Max. Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.25	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 1.0mA	250	--	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D= 1.0mA	2.1	4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 6.0A	--	0.3	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0	--	±0.1	uA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 250V; V_{GS}= 0	--	500	uA
V_{SD}	Forward On-Voltage	I_S= 12A; V_{GS}= 0	--	1.5	V