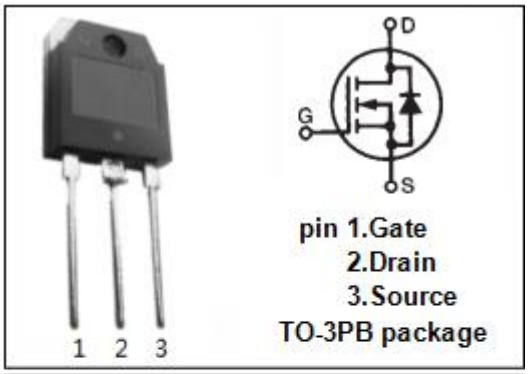
isc N-Channel MOSFET Transistor 2SK4124

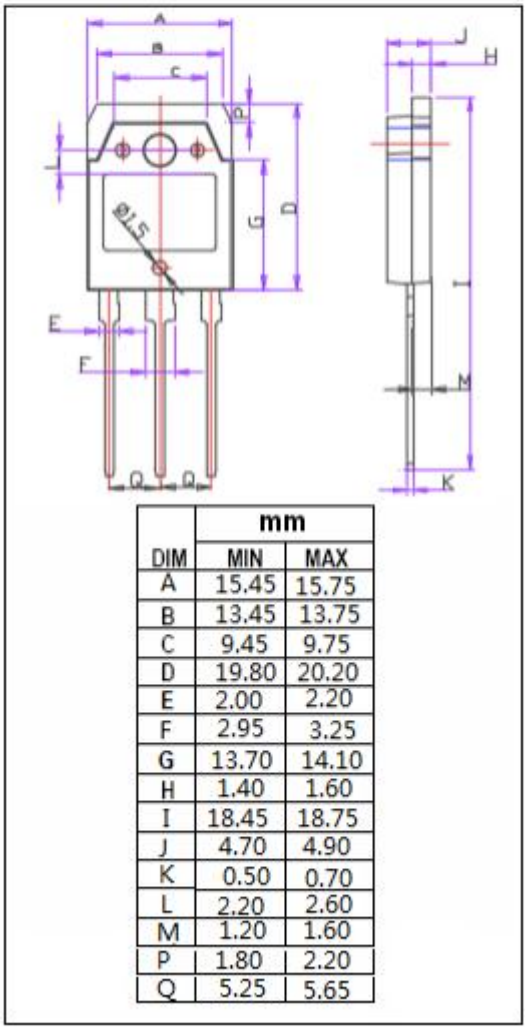
FEATURES

- Drain Current : I_D= 20A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 500V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.43Ω(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	mm MAX
A	15.45	15.75
B	13.45	13.75
C	9.45	9.75
D	19.80	20.20
E	2.00	2.20
F	2.95	3.25
G	13.70	14.10
H	1.40	1.60
I	18.45	18.75
J	4.70	4.90
K	0.50	0.70
L	2.20	2.60
M	1.20	1.60
P	1.80	2.20
Q	5.25	5.65

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	170	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	0.74	℃/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= 10mA	500	--	V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D= 1.0mA	3.0	5.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 8.0A	--	0.43	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}= 400V; V_{GS}= 0	--	100	uA
V_{SD}	Forward On-Voltage	I_S= 20A; V_{GS}= 0	--	1.3	V