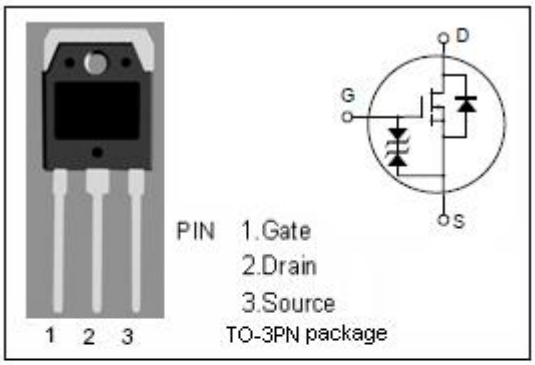
isc N-Channel Mosfet Transistor 2SK3878

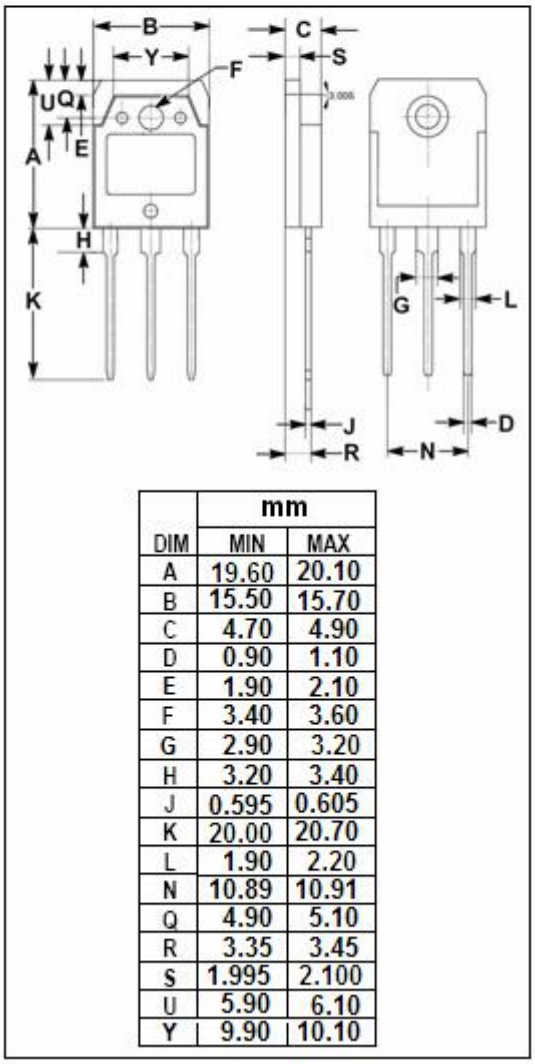
FEATURES

- Drain Current –I_D= 9A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 900V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 1.3Ω (Max)
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirements
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for a load switch or in PWM applications



DIM	mm MIN	mm MAX
A	19.60	20.10
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	20.00	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	6.10
Y	9.90	10.10

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	900	V
V_{GS}	Gate-Source Voltage-Continuous	±30	V
I_D	Drain Current-Continuous	9	A
I_{DM}	Drain Current-Single Plused	27	A
P_D	Total Dissipation @T_C=25℃	150	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	0.833	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance, Junction to Ambient	50	℃/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= 0.25mA	900		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 1.0mA	3	5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 4.0A		1.3	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V; V_{DS}= 0		±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 900V; V_{GS}= 0		10	μA
V_{SD}	Forward On-Voltage	I_S= 9A; V_{GS}= 0		1.4	V