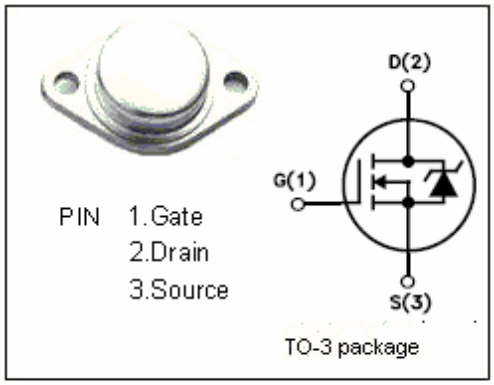
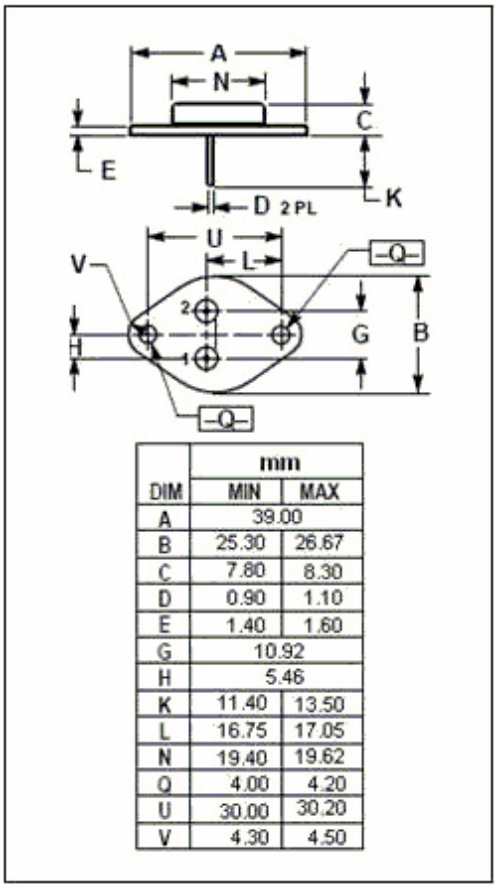
isc N-Channel MOSFET Transistor 25N20



- **FEATURES**
- Drain Current I_D= 25A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 200V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.15Ω (Max)
- Fast Switching

- **APPLICATIONS**
- Switching regulators
- Switching converters, motor drivers, relay drivers



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous	25	A
I_{DM}	Drain Current-Single Plused	60	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	0.83	℃/W

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• ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D=250μA	200			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=1mA	2.0		4.0	V
V_{SD}	Diode Forward On-voltage	I_S= 12.5A ;V_{GS}= 0			1.4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 12.5A			0.15	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=160V; V_{GS}= 0			1	μA
C_{iss}	Input Capacitance	V_{DS}=25V; V_{GS}=0V; f_T=1MHz			350	pF
C_{rss}	Reverse Transfer capacitance				400	
C_{oss}	Output Capacitance				900	
t_r	Rise Time	V_{GS}=10V; I_D=12.5A; V_{DD}=100V; R_G=50Ω			225	ns
$t_{d(on)}$	Turn-on Delay Time				80	
t_f	Fall Time				200	
$t_{d(off)}$	Turn-off Delay Time				400	