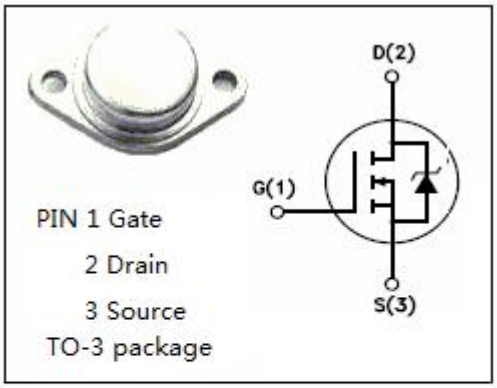
isc N-Channel Mosfet Transistor BUZ201

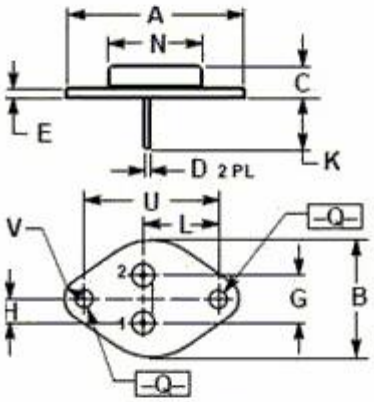
• FEATURES

- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.4 Ω (Max)
- SOA is Power Dissipation Limited
- High input impedance
- High speed switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• DESCRIPTION

Designed for applications such as switching regulators, switching converters, motor drivers,relay drivers and drivers for high power bipolar switching transistors requiring high speed and low gate drive power .



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	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	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	400	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=30℃	12.5	A
I_{DM}	Drain Current-Single Plused	50	A
P_{tot}	Total Dissipation@TC=25℃	125	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	35	℃/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=0.25mA	400			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=1mA	2.1		4.0	V
V_{SD}	Diode Forward On-voltage	I_S= 25A ;V_{GS}= 0			1.7	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 8A			0.4	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=400V; V_{GS}= 0			250	μA
Gfs	Forward Transconductance	V_{DS}= 25V； I_D=8A	3.3			S
$t_{d(on)}$	Turn-on Delay Time	V_{GS}=10V; I_D=2.9A; V_{DD}=30V; R_{GS}=50Ω			75	ns
t_r	Rise Time				120	
$t_{d(off)}$	Turn-off Delay Time				430	
t_f	Fall Time				140	