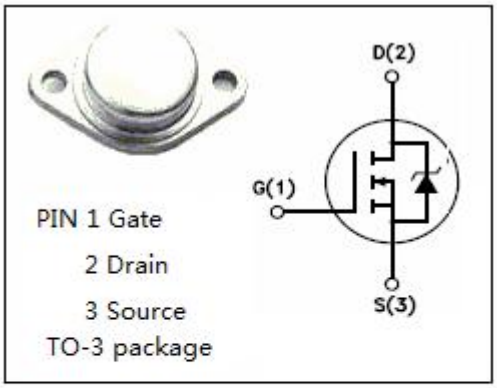
isc N-Channel Mosfet Transistor BUZ24

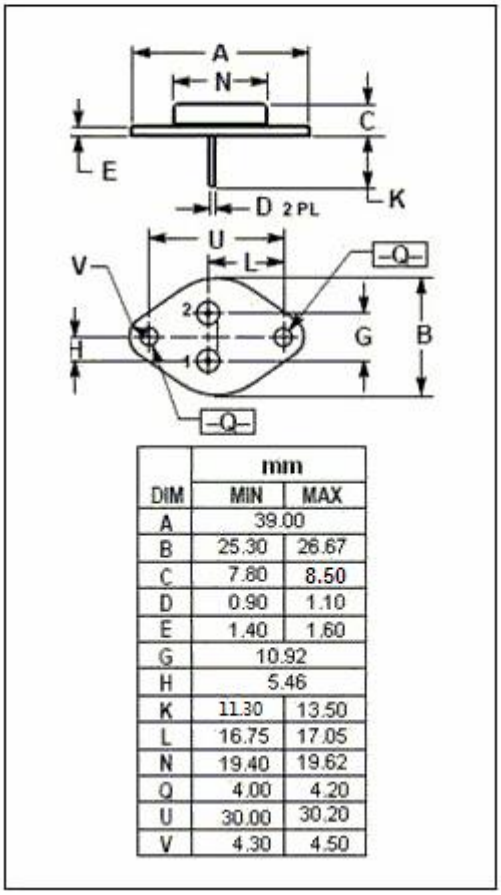
• FEATURES

- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 0.06Ω (Max)
- SOA is Power Dissipation Limited
- High speed switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• DESCRITION

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)	100	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=27℃	32	A
I_{DM}	Drain Current-Single Plused	128	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	1.0	℃/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	100			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= 64A ;V_{GS}= 0			1.7	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 20A			0.06	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=100V; V_{GS}= 0			1	μA
Gfs	Forward Transconductance	V_{DS}= 25V； I_D=20A	10			S
$t_{d(on)}$	Turn-on Delay Time	V_{GS}=10V; I_D=3A; V_{DD}=30V; R_{GS}=50Ω			45	ns
t_r	Rise Time				125	
$t_{d(off)}$	Turn-off Delay Time				320	
t_f	Fall Time				160	

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