

isc N-Channel Mosfet Transistor

BUZ64

• FEATURES

- 11.5A, 400V
- SOA is Power Dissipation Limited
- Nanosecond Switching Speeds
- Linear Transfer Characteristics
- High Input Impedance
- Majority Carrier Device
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

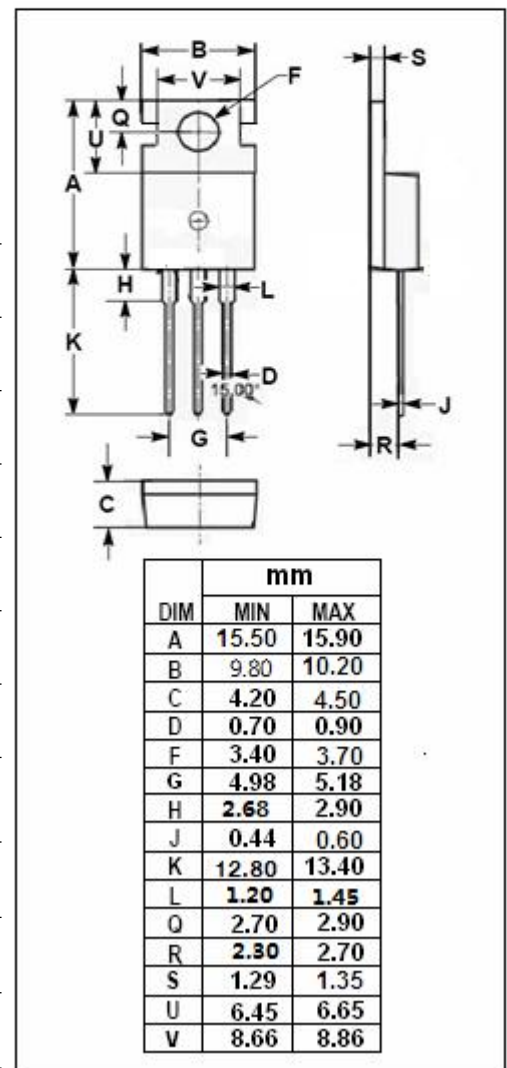
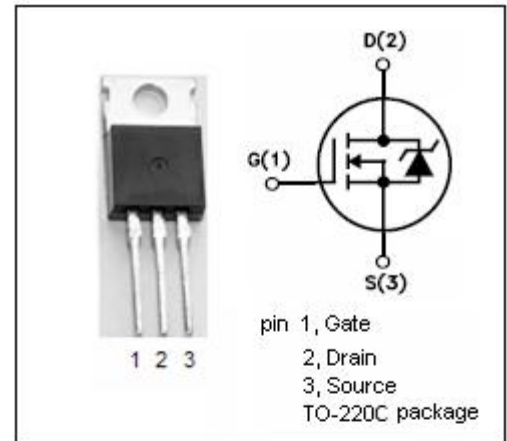
Designed for applications such as switching regulators, switching converters, motor drivers, relay drivers and drivers for high power bipolar switching transistors requiring high speed and low gate drive power.

• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	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=37°C	11.5	A
P _{tot}	Total Dissipation@TC=25°C	125	W
T _j	Max. Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.67	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	75	°C/W



isc N-Channel Mosfet Transistor**BUZ64****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}= 0; I_D= 0.25\text{mA}$	400		V
$V_{GS(TH)}$	Gate Threshold Voltage	$V_{DS}= V_{GS}; I_D= 10\text{mA}$	2.1	4	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	$V_{GS}= 10\text{V}; I_D= 5\text{A}$		0.4	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}= \pm 20\text{V}; V_{DS}= 0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}= 400\text{V}; V_{GS}= 0$		250	μA
V_{SD}	Diode Forward Voltage	$I_F=11\text{A}; V_{GS}= 0$		1.6	V

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