

Isc P-Channel MOSFET Transistor

BUZ172

FEATURES

- With TO-220 package
- Low input capacitance and gate charges
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

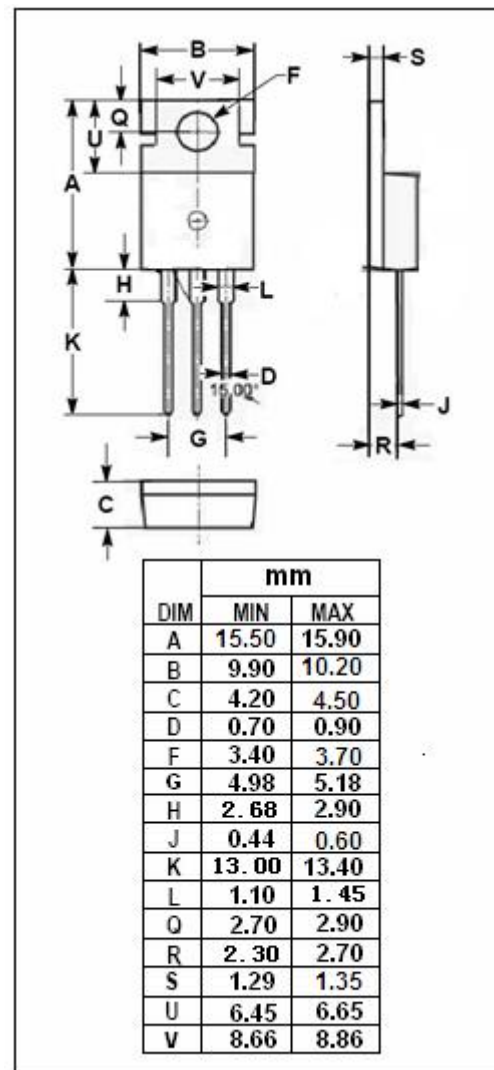
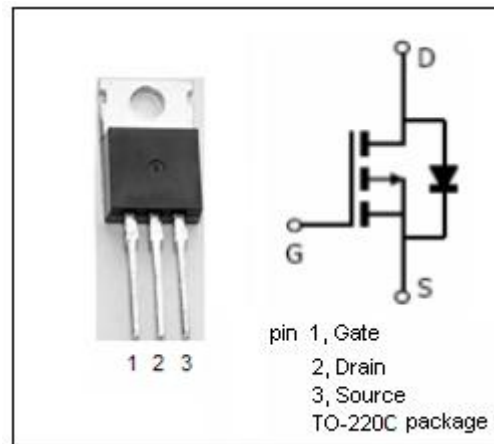
- Switching applications
- Load switch
- Power management

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	-100	V
V _{GSS}	Gate-Source Voltage	±20	V
I _D	Drain Current-Continuous	-5.5	A
I _{DM}	Drain Current-Single Pulsed	-22	A
P _D	Total Dissipation @T _c =25°C	40	W
T _j	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th(ch-c)}	Channel-to-case thermal resistance	3.1	°C/W
R _{th(ch-a)}	Channel-to-ambient thermal resistance	75	°C/W



Isc P-Channel MOSFET Transistor**BUZ172****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=-0.25mA$	-100			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=-10V; I_D=-1mA$	-2.1		-4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=-10V; I_D=-3.7A$		400	600	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}=\pm 20V; V_{DS}=0V$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=-100V; V_{GS}=0V$			-1	μA
V_{SDF}	Diode forward voltage	$I_{SD}=-11A, V_{GS}=0V$		-1.0	-1.3	V

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