

isc N-Channel Mosfet Transistor

BUZ71

• FEATURES

- Low R_{DS(on)}
- · SOA is Power Dissipation Limited
- · Nanosecond Switching Speeds
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

- · High current , high speed switching
- Solenoid and relay drivers
- DC-DC & DC-AC converters

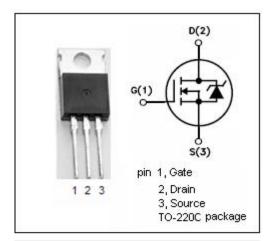


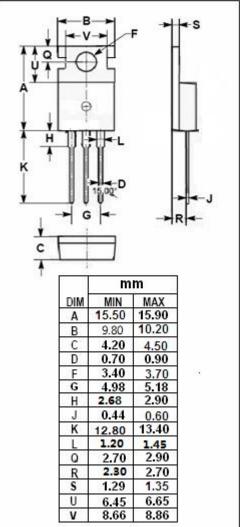
• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	50	V
V _{GS}	Gate-Source Voltage	±20	V
I _D	Drain Current-continuous@ TC=25℃	18	А
I _{DM}	Drain Current-Single Plused	72	Α
P _{tot}	Total Dissipation@TC=25℃	80	W
Tj	Max. Operating Junction Temperature	175	$^{\circ}$
T _{stg}	Storage Temperature Range	-65~175	$^{\circ}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.88	°C/W
R _{th j-a}	Thermal Resistance,Junction to Ambient	62.5	°C/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	50			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 = 36A ;V _{GS} = 0			2.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 9A			0.1	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =50V; V _{GS} = 0			250	μА
Gfs	Forward Transconductance	V _{DS} = 25V; I _D =9A	5.0			S
t _{d(on)}	Turn-on Delay Time	V _{GS} =10V;			65	
tr	Rise Time	I _D =3A;			95	
t _{d(off)}	Turn-off Delay Time	V_{DD} =30V; R_{GS} =50 Ω			160	ns
t _f	Fall Time				120	

NOTICE:

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