

isc N-Channel MOSFET Transistor

BUK445-200A/B

DESCRIPTION

- 20A, 60V
- SOA is Power Dissipation Limited
- Nanosecond Switching Speeds
- Linear Transfer Characteristics
- Majority Carrier Device
- Related Literature

APPLICATIONS

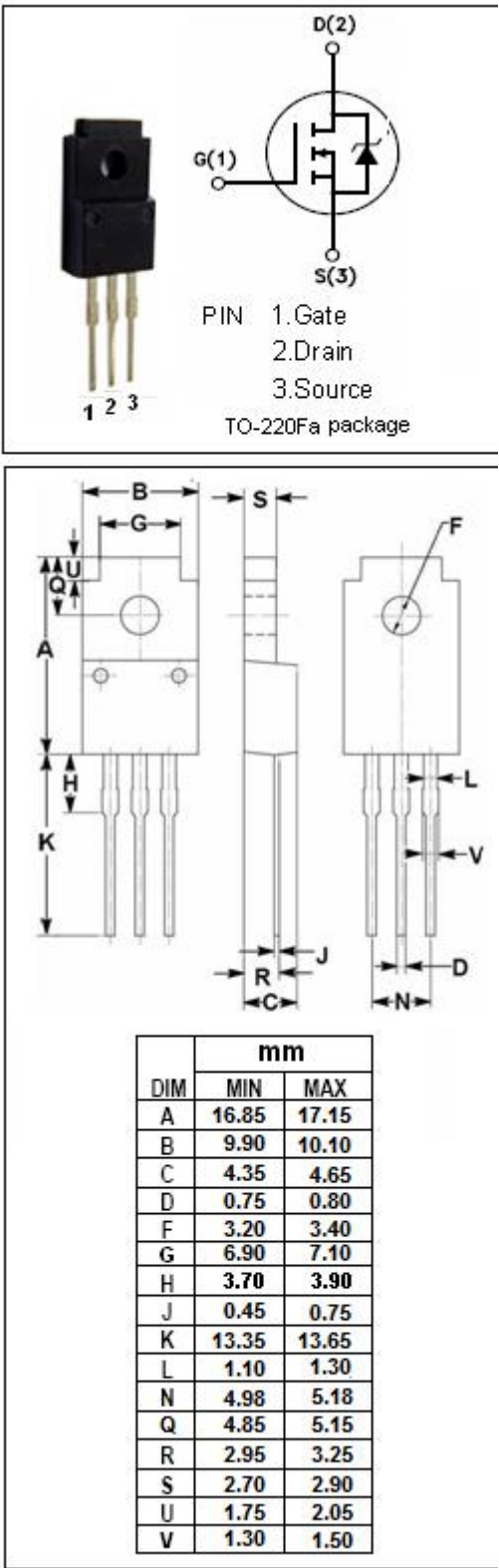
- use in Switched Mode Power Supplies (SMPS), motor control,welding, And in general purpose switching resistance application

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	60	V
V _{GS}	Gate-Source Voltage	±30	V
I _D	Drain Current-continuous @ TC=37°C	BUK445-200A	A
		BUK445-200B	
P _{tot}	Total Dissipation@TC=25°C	30	W
T _j	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	4.17	°C/W
R _{th j-a}	Thermal Resistance,Junction to Ambient	55	°C/W



isc N-Channel Mosfet Transistor**BUK445-200A/B****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	200		V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 1mA	2.1	4	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D = 7A		0.23	Ω
		BUK445-200A BUK445-200B		0.28	
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 200V; V _{GS} = 0		10	uA
V _{SD}	Diode Forward Voltage	I _F =7.6A; V _{GS} = 0		1.5	V