

isc N-Channel MOSFET Transistor

BUK445-60A

DESCRIPTION

- 21A, 60V
- SOA is Power Dissipation Limited
- Nanosecond Switching Speeds
- Linear Transfer Characteristics
- Majority Carrier Device
- Related Literature

APPLICATIONS

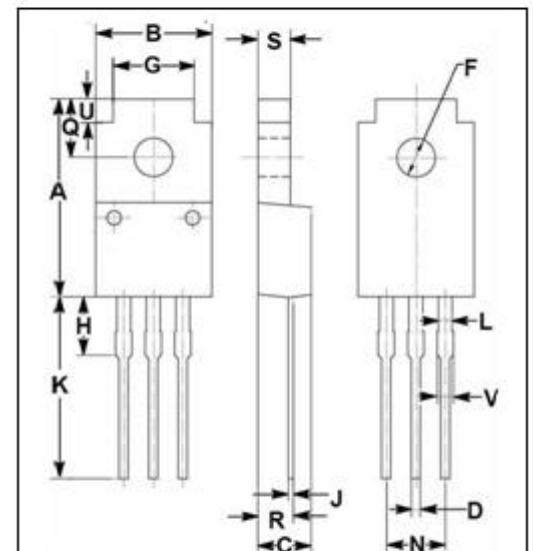
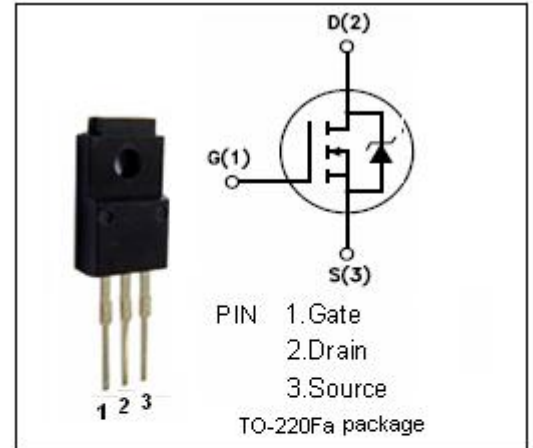
- use in Switched Mode Power Supplies (SMPS), motor control,welding, And in general purpose switching resistance application

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	21	A
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



DIM	mm	
	MIN	MAX
A	16.85	17.15
B	9.90	10.10
C	4.35	4.65
D	0.75	0.80
F	3.20	3.40
G	6.90	7.10
H	3.70	3.90
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
R	2.95	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

isc N-Channel Mosfet Transistor**BUK445-60A****• 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	60		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 = 20A		0.038	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 60V; V _{GS} = 0		1	uA
V _{SD}	Diode Forward Voltage	I _F = 21A; V _{GS} = 0		1.8	V