

isc N-Channel MOSFET Transistor

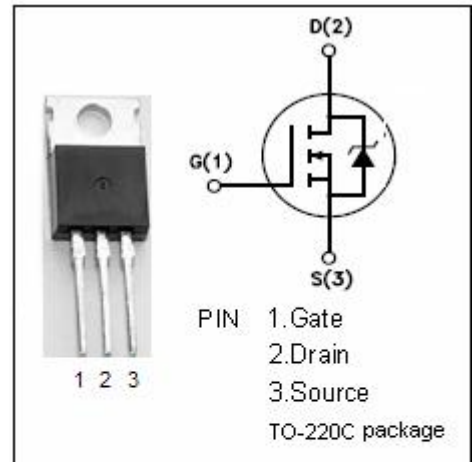
BUK453-100A/B

DESCRIPTION

- High speed switching
- Low $R_{DS(ON)}$
- Easy driver for cost effective application

APPLICATIONS

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

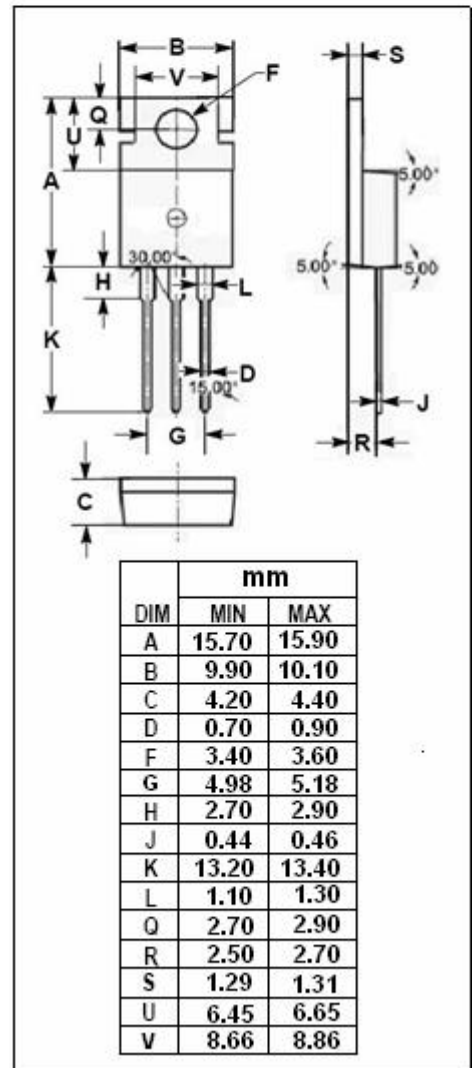


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	100	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous @ $TC=37^{\circ}C$	BUK453-100A	14
		BUK453-100B	13
P_{tot}	Total Dissipation @ $TC=25^{\circ}C$	75	W
T_j	Max. Operating Junction Temperature	175	$^{\circ}C$
T_{stg}	Storage Temperature Range	175	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance,Junction to Case	2.0	$^{\circ}C/W$
$R_{th j-a}$	Thermal Resistance,Junction to Ambient	60	$^{\circ}C/W$



isc N-Channel Mosfet Transistor**BUK453-100A/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	100		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 = 5A		0.16	Ω
		BUK453-100A		0.2	
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0		±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 100V; V _{GS} = 0		10	uA
V _{SD}	Diode Forward Voltage	I _F = 14A; V _{GS} = 0		1.5	V