

isc N-Channel MOSFET Transistor
BUK445-100A/B
DESCRIPTION

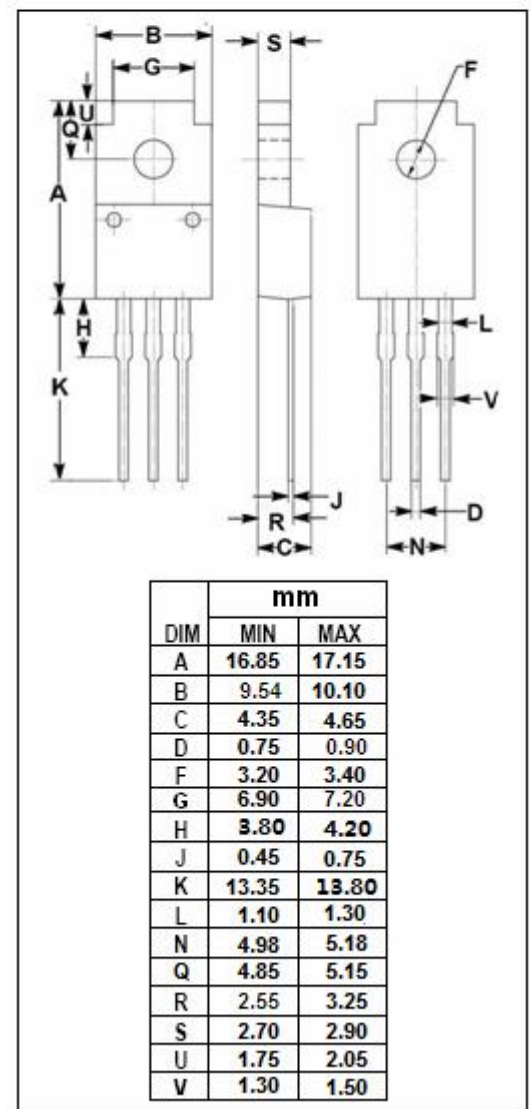
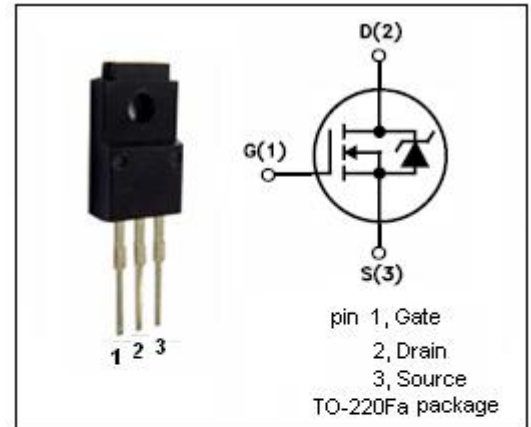
- Drain Source Voltage-
: $V_{DSS}=100V(\text{Min})$
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

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

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 @ $TC=25^\circ\text{C}$	BUK445-100A	14
		BUK445-100B	12
P_{tot}	Total Dissipation@ $TC=25^\circ\text{C}$	30	W
T_j	Max. Operating Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	150	$^\circ\text{C}$



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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 1mA	100			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =1mA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D =1A	BUK445-100A		0.08	Ω
			BUK445-100B		0.1	Ω
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			20	uA

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