

isc N-Channel MOSFET Transistor

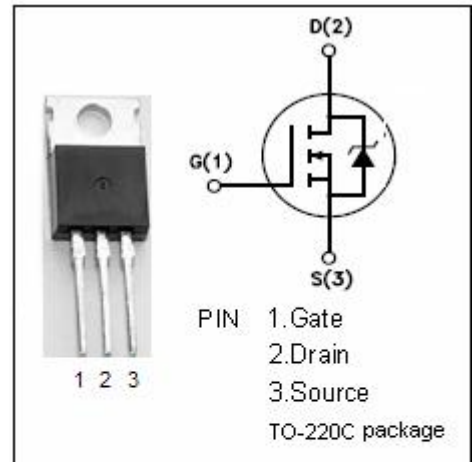
BUK452-60A/B

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

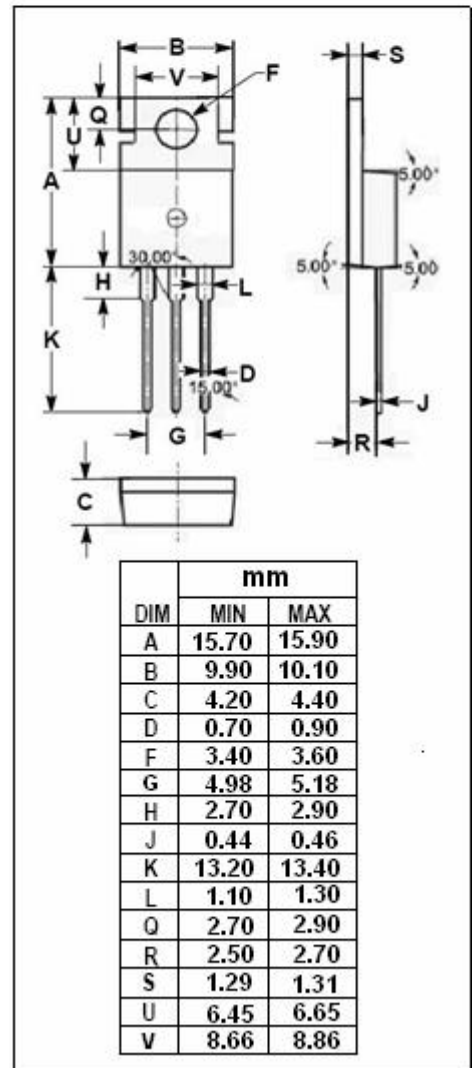


ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	60	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-continuous @ $TC=37^{\circ}C$	BUK452-60A	15
		BUK452-60B	14
$P_{tot}$	Total Dissipation @ $TC=25^{\circ}C$	60	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	2.5	$^{\circ}C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	60	$^{\circ}C/W$



**isc N-Channel Mosfet Transistor****BUK452-60A/B****• ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	60		V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 1mA	2.1	4	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 8.5A		0.13	Ω
		BUK452-60A BUK452-60B		0.15	
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0		10	uA
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> = 15A; V <sub>GS</sub> = 0		1.7	V