

isc Silicon NPN Power Transistors
BUX32/A/B
DESCRIPTION

High Switching Speed

- Collector-Emitter Sustaining Voltage-
 : $V_{CEO(SUS)} = 400V$ (Min)-BUX32
 = 450V (Min)-BUX32A
 = 450V (Min)-BUX32B
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

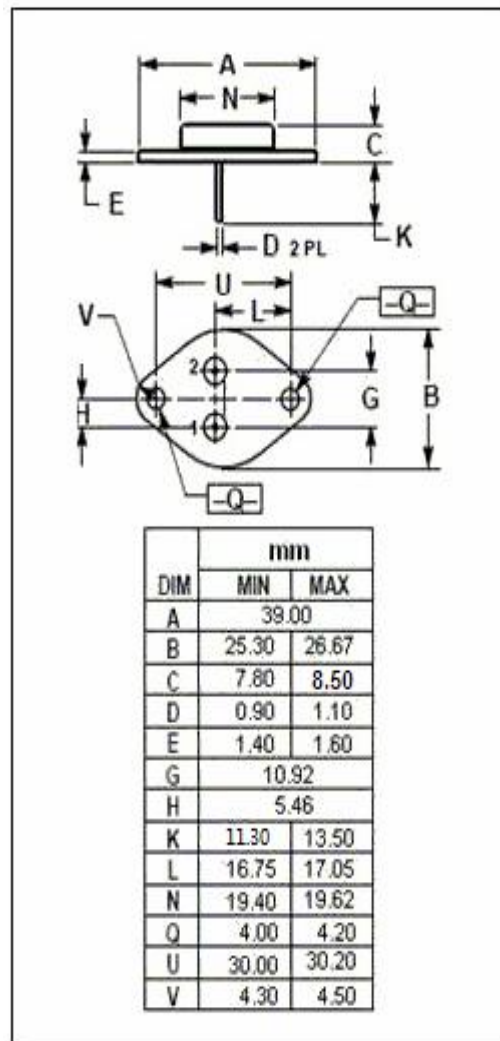
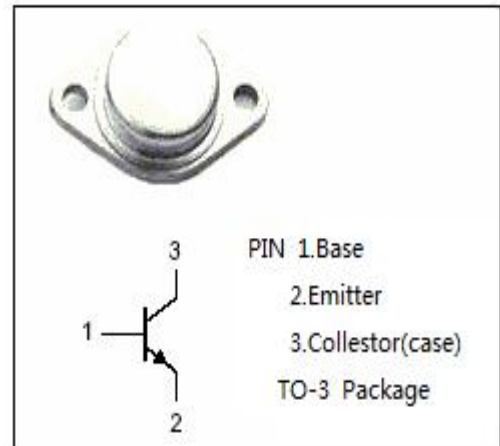
- Designed for off-line power supplies and are also well suited for use in a wide range of inverter or converter circuits and pulse-width-modulated regulators.

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

SYMBOL	PARAMETER	MAX	UNIT	
V_{CES}	Collector- Emitter Voltage($V_{BE} = 0$)	BUX32	800	V
		BUX32A	900	
		BUX32B	1000	
V_{CEO}	Collector-Emitter Voltage	BUX32	400	V
		BUX32A	450	
		BUX32B	500	
V_{EBO}	Emitter-Base Voltage	8	V	
I_C	Collector Current-Continuous	12	A	
I_{CM}	Collector Current-Peak	15	A	
I_B	Base Current-Continuous	5	A	
P_C	Collector Power Dissipation @ $T_c=25^\circ C$	150	W	
T_j	Junction Temperature	200	$^\circ C$	
T_{stg}	Storage Temperature Range	-65~200	$^\circ C$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	BUX32	I _c = 50mA ; I _B = 0	400			V
		BUX32A		450			
		BUX32B		500			
V _{CE(sat)}	Collector-Emitter Saturation Voltage		I _c = 6A; I _B = 1.2A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage		I _c = 6A; I _B = 1.2A			1.3	V
I _{CBO}	Collector Cutoff Current	BUX32	V _{CB} = 800V; I _B = 0 V _{CB} = 800V; I _B = 0, T _C =125°C			0.1 1.0	mA
		BUX32A	V _{CB} = 900V; I _B = 0 V _{CB} = 900V; I _B = 0, T _C =125°C			0.1 1.0	
		BUX32B	V _{CB} = 1000V; I _E = 0 V _{CB} = 1000V; I _E = 0, T _C =125°C			0.1 1.0	
I _{EBO}	Emitter Cutoff Current		V _{EB} = 8V; I _C = 0			2	mA
h _{FE}	DC Current Gain		I _C = 6A ; V _{CE} = 3V	8			
f _T	Current-Gain—Bandwidth Product		I _C = 0.2A ; V _{CE} = 10V	15			MHz

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