

**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

**APPLICATIONS**

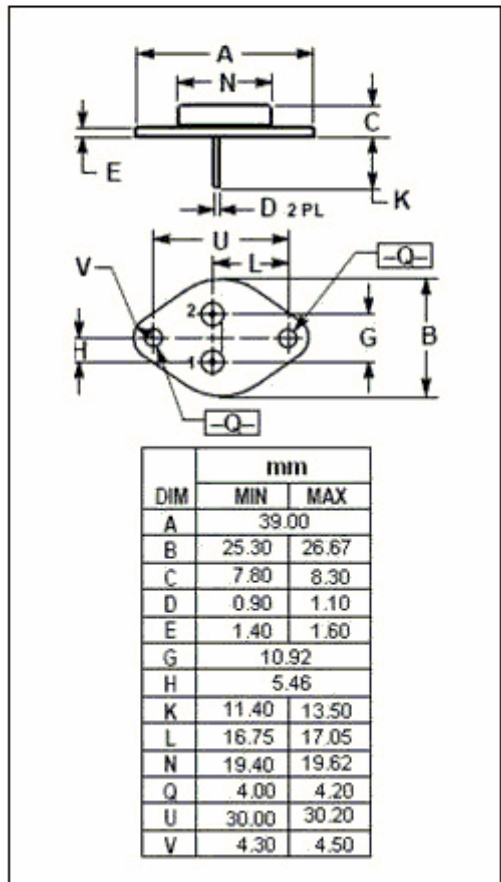
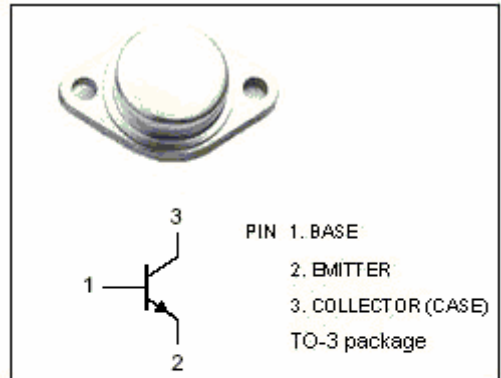
- Designed for off-line power supplies and are also well suited for use in a wide range of inverter or converter circuits and pulse-width-modulated regulators.

**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	8	A	
$I_{CM}$	Collector Current-Peak	10	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	$^{\circ}C/W$



## isc Silicon NPN Power Transistors

## BUX32/A/B

## ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BUX32	$I_C=0.2\text{A}; I_B=0$	400			V
		BUX32A		450			
		BUX32B		500			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		$I_C=6\text{A}; I_B=1.2\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		$I_C=6\text{A}; I_B=1.2\text{A}$			1.3	V
$I_{CEV}$	Collector Cutoff Current	BUX32	$V_{CE}=800\text{V}; V_{BE}=-1.5\text{V}$ $V_{CE}=800\text{V}; V_{BE}=-1.5\text{V}, T_C=125^{\circ}\text{C}$			0.1 1.0	mA
		BUX32A	$V_{CE}=900\text{V}; V_{BE}=-1.5\text{V}$ $V_{CE}=900\text{V}; V_{BE}=-1.5\text{V}, T_C=125^{\circ}\text{C}$			0.1 1.0	
		BUX32B	$V_{CE}=1000\text{V}; V_{BE}=-1.5\text{V}$ $V_{CE}=1000\text{V}; V_{BE}=-1.5\text{V}, T_C=125^{\circ}\text{C}$			0.1 1.0	
$I_{EBO}$	Emitter Cutoff Current		$V_{EB}=8\text{V}; I_C=0$			2	mA
$h_{FE}$	DC Current Gain		$I_C=6\text{A}; V_{CE}=3\text{V}$	8			
$f_T$	Current-Gain—Bandwidth Product		$I_C=0.2\text{A}; V_{CE}=10\text{V}$	15			MHz