

# isc Silicon NPN Power Transistor

**BU132**

## DESCRIPTION

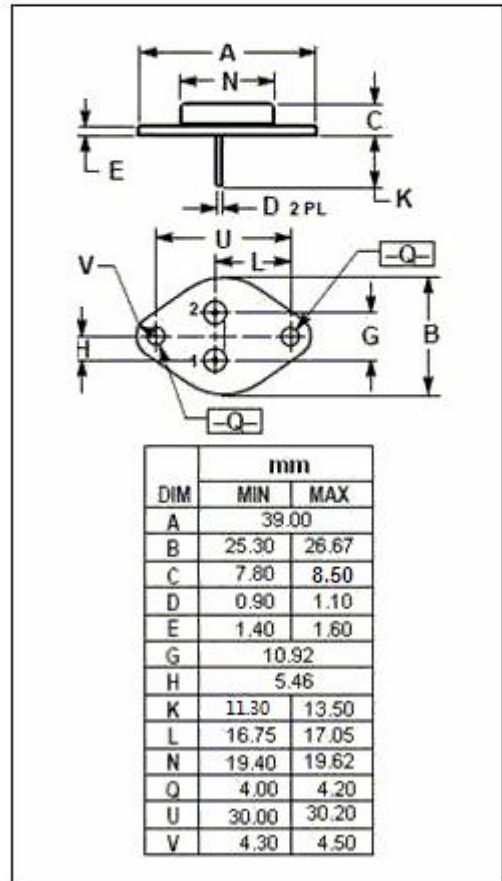
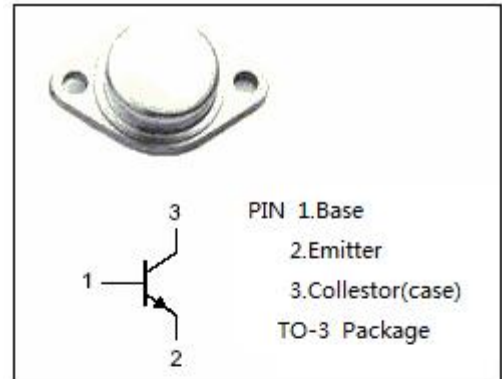
- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = 1.0\text{ V(Max)} @ I_C = 0.5\text{ A}$
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 600\text{ V(Min)}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for general-purpose switching and amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	800	V
$V_{CEO}$	Collector-Emitter Voltage	600	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	1	A
$I_{CM}$	Collector Current-Peak	2	A
$P_C$	Collector Power Dissipation@ $T_c = 25^\circ\text{C}$	15	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~150	$^\circ\text{C}$



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## 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	$I_C= 50\text{mA}$ ; $I_B= 0$	600			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 1\text{mA}$ ; $I_E= 0$	800			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 1\text{mA}$ ; $I_C= 0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 0.5\text{A}$ ; $I_B= 50\text{mA}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 0.5\text{A}$ ; $I_B= 50\text{mA}$			1.5	V
$I_{CBO}$	Collector Base Cutoff Current	$V_{CB}=800\text{V}$ ; $I_E= 0$			0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 6\text{V}$ ; $I_C= 0$			0.1	mA
$h_{FE}$	DC Current Gain	$I_C= 0.25\text{A}$ ; $V_{CE}= 10\text{V}$	25		125	
$f_T$	Current Gain-Bandwidth Product	$I_C= 0.5\text{A}$ ; $V_{CE}= 10\text{V}$		8		MHz

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