

**isc Silicon NPN Power Transistors**
**BUW132/A**
**DESCRIPTION**

High Switching Speed

- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 450V$  (Min)-BUW132  
500V (Min)-BUW132A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

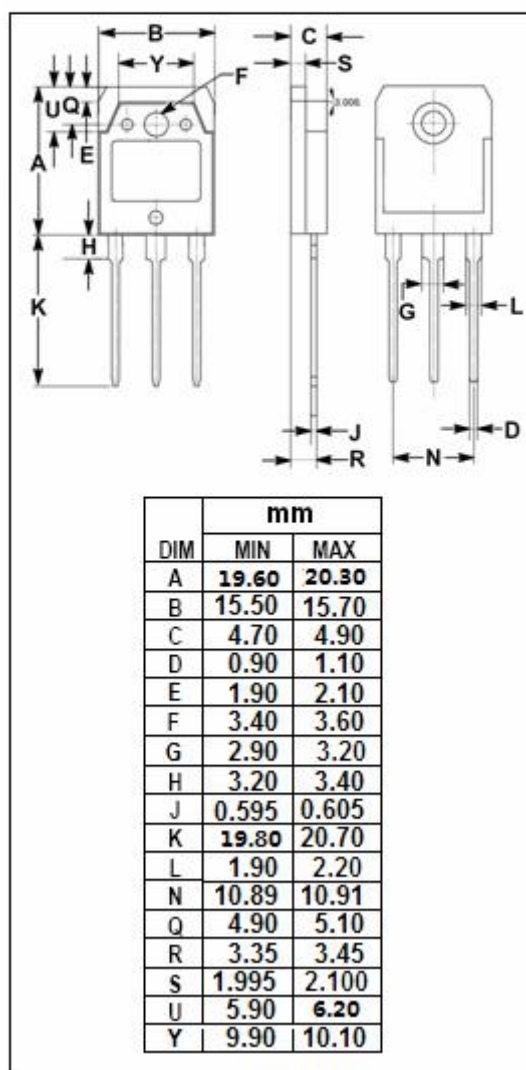
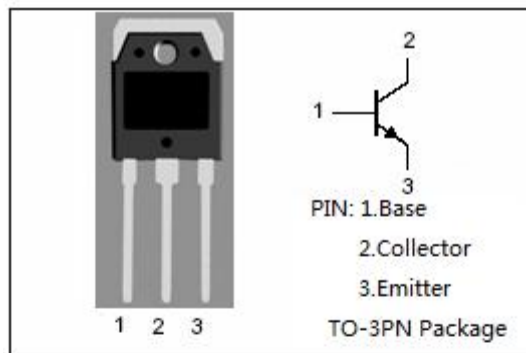
- Designed for use in very fast switching applications in inductive circuits.

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

SYMBOL	PARAMETER	MAX	UNIT	
$V_{CES}$	Collector- Emitter Voltage ( $V_{BE} = 0$ )	BUW132	850	V
		BUW132A	1000	
$V_{CEO}$	Collector-Emitter Voltage	BUW132	450	V
		BUW132A	500	
$V_{EBO}$	Emitter-Base Voltage	6	V	
$I_C$	Collector Current-Continuous	8	A	
$I_{CM}$	Collector Current-Peak	16	A	
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ C$	125	W	
$T_j$	Junction Temperature	150	$^\circ C$	
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ C$	

**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

## BUW132/A

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-Emitter Sustaining Voltage	BUW132	I <sub>c</sub> = 50mA ; I <sub>B</sub> = 0			V
		BUW132A				
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	BUW132	I <sub>c</sub> = 3A; I <sub>B</sub> = 0.4A			V
		BUW132A	I <sub>c</sub> = 3A; I <sub>B</sub> = 0.6A			
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	BUW132	I <sub>c</sub> = 5A; I <sub>B</sub> = 0.66A			V
		BUW132A	I <sub>c</sub> = 5A; I <sub>B</sub> = 1A			
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	BUW132	I <sub>c</sub> = 5A; I <sub>B</sub> = 0.66A			V
		BUW132A	I <sub>c</sub> = 5A; I <sub>B</sub> = 1A			
I <sub>CB0</sub>	Collector-Base Cutoff Current	V <sub>CB</sub> =V <sub>CB0</sub> ; I <sub>E</sub> = 0 V <sub>CB</sub> =V <sub>CB0</sub> ; I <sub>E</sub> = 0; T <sub>J</sub> =100°C			0.25 1.5	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V; I <sub>C</sub> = 0			1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>c</sub> = 8A ; V <sub>CE</sub> = 5V	5			

**NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.