

## **INCHANGE SEMICONDUCTOR**

## isc Silicon PNP Darlington Power Transistor

## 2SB897

### DESCRIPTION

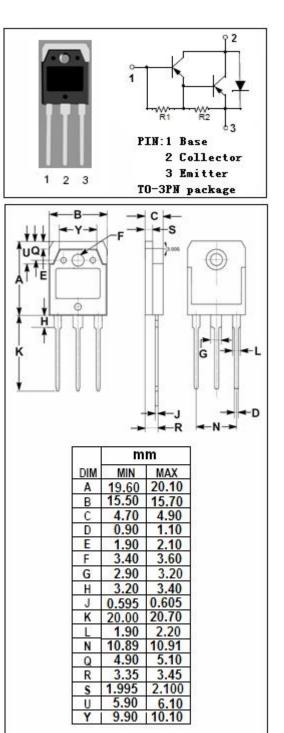
- High DC Current Gain-
- : h<sub>FE</sub> = 1000(Min)@ I<sub>C</sub>= -10A
- Low Collector Saturation Voltage-
- : V<sub>CE(sat)</sub> = -1.5V(Max.) @I<sub>C</sub>= 10A
- Complement to Type 2SD1210
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **APPLICATIONS**

• Designed for audio frequency power amplifier and low speed high current switching industrial use.

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	-100	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-100	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-8	V	
Ι <sub>C</sub>	Collector Current-Continuous	-10	А	
I <sub>CM</sub>	Collector Current-Peak	-20	А	
IB	Base Current- Continuous	-1.0	А	
Pc	Collector Power Dissipation $@T_c=25^{\circ}C$	80	W	
Tj	Junction Temperature	150	Ĉ	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C	



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## **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> = 0	-100			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A ,I <sub>B</sub> = -25mA			-1.5	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = -10A ,I <sub>B</sub> = -25mA			-2.0	V
I <sub>СВО</sub>	Collector Cutoff current	V <sub>CB</sub> = -100V, I <sub>E</sub> = 0			-10	μA
I <sub>EBO</sub>	Emitter Cutoff current	V <sub>EB</sub> = -8V, I <sub>C</sub> = 0			-5	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -10A ; V <sub>CE</sub> = -2V	1000			



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