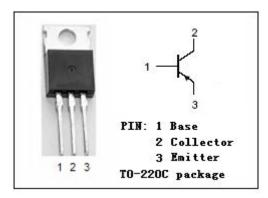


# isc Silicon PNP Power Transistor

2SB813

### **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -60V(Min)
- Good Linearity of h<sub>FE</sub>
- · High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

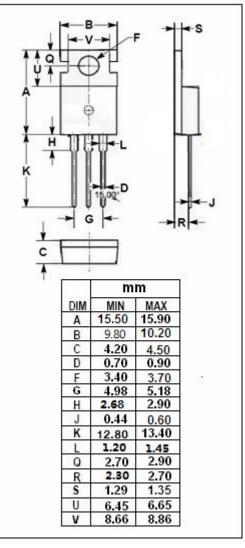


#### **APPLICATIONS**

• Designed for AF power amplifier applications

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-60	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-60	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
Ic	Collector Current-Continuous	-4	А
Ісм	Collector Current-Peak	-8	А
Pc	Collector Power Dissipation @ T <sub>c</sub> =25℃	40	W
TJ	Junction Temperature	150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$





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#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -5mA; I <sub>B</sub> = 0	-60			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>E</sub> = 0	-60			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA; I <sub>C</sub> = 0	-5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -4A; I <sub>B</sub> = -0.4A			-1.5	V
Iceo	Collector Cutoff Current	V <sub>CE</sub> = -40V; I <sub>B</sub> = 0			-100	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-100	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -2V	60		200	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.1A; V <sub>CE</sub> = -5V		20		MHz

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