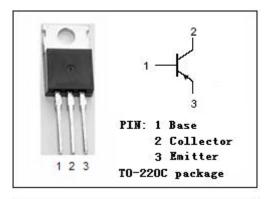


# isc Silicon PNP Power Transistor

### **DESCRIPTION**

- High Collector Current:: I<sub>C</sub>= -7A
- · Low Collector Saturation Voltage
- : V<sub>CE(sat)</sub>= -1.0V(Max)@I<sub>C</sub>= -4A
- · Wide Area of Safe Operation
- Complement to Type 2SD1580
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

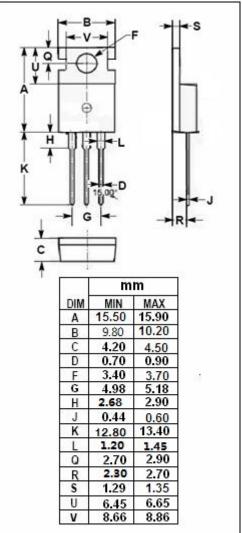


## **APPLICATIONS**

• Designed for low frequency power amplifier applications.

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>СВО</sub>	Collector-Base Voltage	-80	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-80	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
Ic	Collector Current-Continuous	-7	А
Ісм	Collector Current-Peak	-10	А
Pc	Total Power Dissipation @ T <sub>C</sub> =25℃	40	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$





## isc Silicon PNP Power Transistor

2SB1289

### **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> = -1mA; I <sub>B</sub> = 0	-80			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0	-80			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -50 μ A; I <sub>C</sub> = 0	-5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	Ic= -4A; I <sub>B</sub> = -0.4A			-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -4A; I <sub>B</sub> = -0.4A			-1.5	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -80V; I <sub>E</sub> = 0			-10	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-10	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	60		320	
Сов	Output Capacitance	I <sub>E</sub> =0; V <sub>CB</sub> = -10V; f= 1MHz		200		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.5A; V <sub>CE</sub> = -5V		12		MHz

### h<sub>FE</sub> Classifications

D	E	F
60-120	100-200	160-320

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