

## **isc** Silicon PNP Power Transistors

# 2SB697

### DESCRIPTION

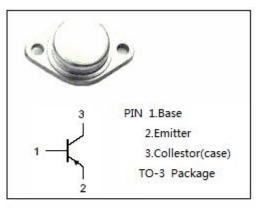
- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -140V(Min)
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD733
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

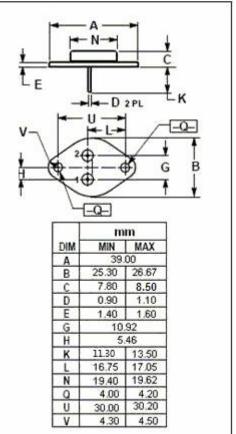
### **APPLICATIONS**

- · Designed for AF power amplifier applications.
- Recommended for output stage of 80W power amplifier.

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-160	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-140	V
V <sub>EBO</sub>	Emitter-Base Voltage	-6	V
Ι <sub>C</sub>	Collector Current-Continuous	-12	A
I <sub>CM</sub>	Emitter Current-Peak	-20	A
Pc	Collector Power Dissipation @T <sub>C</sub> =25℃	100	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-40~150	°C





isc website: www.iscsemi.com



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## **ELECTRICAL CHARACTERISTICS**

#### Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	Ic= -5mA; R <sub>BE</sub> = ∞	-140			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>c</sub> = -5mA; I <sub>E</sub> = 0	-160			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -5mA; I <sub>C</sub> = 0	-6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -6A; I <sub>B</sub> = -0.6A			-2.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V			-1.5	V
I <sub>СВО</sub>	Collector Cutoff Current	V <sub>CB</sub> = -80V; I <sub>E</sub> = 0			-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	40		320	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -5A; V <sub>CE</sub> = -5V	20			

### h<sub>FE-1</sub> Classifications

С	D	E	F
40-80	60-120	100-200	160-320

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