2SB558



# isc Silicon PNP Power Transistors

#### **DESCRIPTION**

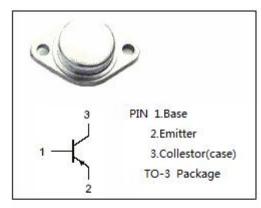
- · Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -100V(Min)
- · High Power Dissipation-
  - : P<sub>C</sub>= 60W(Max)@T<sub>C</sub>=25°C
- Complement to Type 2SD428
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

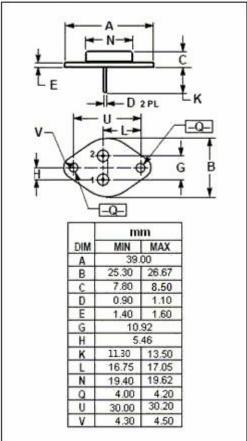
### **APPLICATIONS**

- · Designed for power amplifier applications.
- Recommended for 40W high-fidelity audio frequency amplifier output stage.



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 -5		V
Ic	Collector Current-Continuous -7		Α
I <sub>E</sub>	Emitter Current-Continuous	7	Α
Pc	Collector Power Dissipation @T <sub>C</sub> =25°C	60	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-65~150	$^{\circ}$ C







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### **ELECTRICAL CHARACTERISTICS**

Tj=25℃ unless otherwise specified

1)-23 C unless otherwise specified							
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -30mA; I <sub>B</sub> = 0	-100			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> = -5A; I <sub>B</sub> = -0.5A			-2.5	V	
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -5A; V <sub>CE</sub> = -5V			-2.0	V	
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -50V; I <sub>E</sub> = 0			-0.1	mA	
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; 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		140		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -5A; V <sub>CE</sub> = -5V	15				
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f= 1MHz		220		pF	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V		7		MHz	

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

R	0		
40-80	70-140		

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