

isc Silicon PNP Power Transistors

2SB539

DESCRIPTION

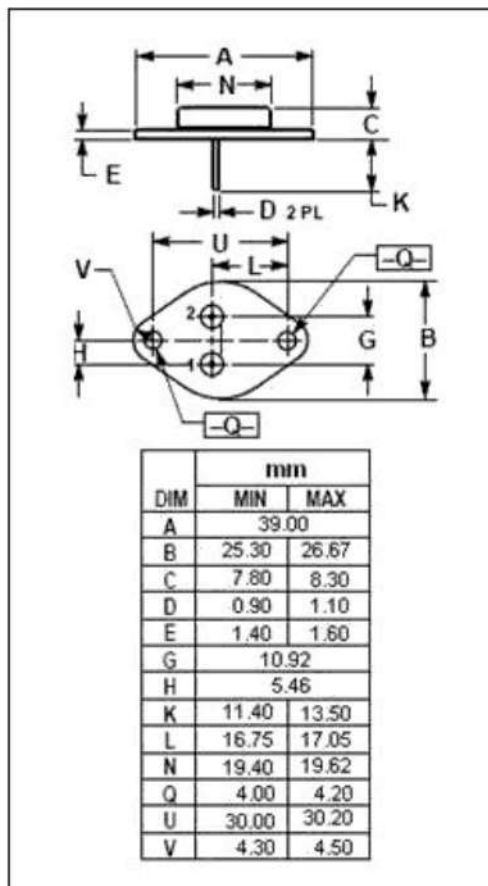
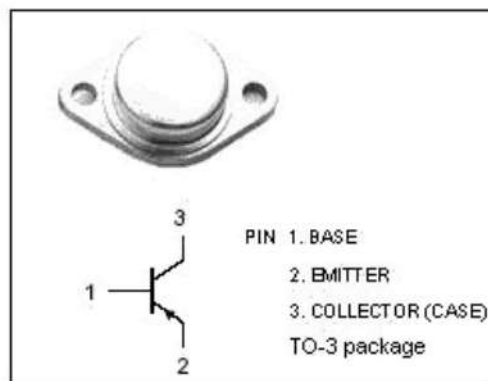
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min})$
- High Power Dissipation-
: $P_C = 100W(\text{Max})@T_C=25^\circ\text{C}$
- Complement to Type 2SD287

APPLICATIONS

- Designed for audio frequency power amplifier applications.
- Recommended for 70~80W high-fidelity audio frequency amplifier output stage.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-130	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Pulse	-15	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$



isc Silicon PNP Power Transistors**2SB539****ELECTRICAL CHARACTERISTICS****T_j=25°C** unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -0.6A			-2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -6A; I _B = -0.6A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V; I _E = 0			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -2A; V _{CE} = -5V	40		200	
h _{FE-2}	DC Current Gain	I _C = -5A; V _{CE} = -5V	25			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		420		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.2A; V _{CE} = -10V		7		MHz

◆ **h_{FE-1} Classifications**

S	R	Q
40-80	60-120	100-200