

Silicon PNP Power Transistors

2SB539

DESCRIPTION

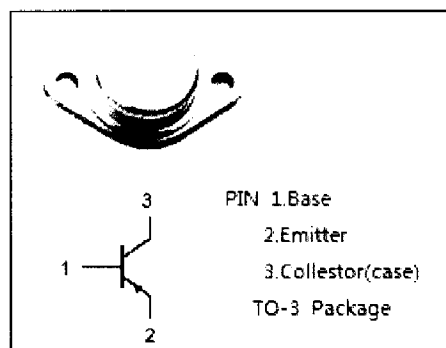
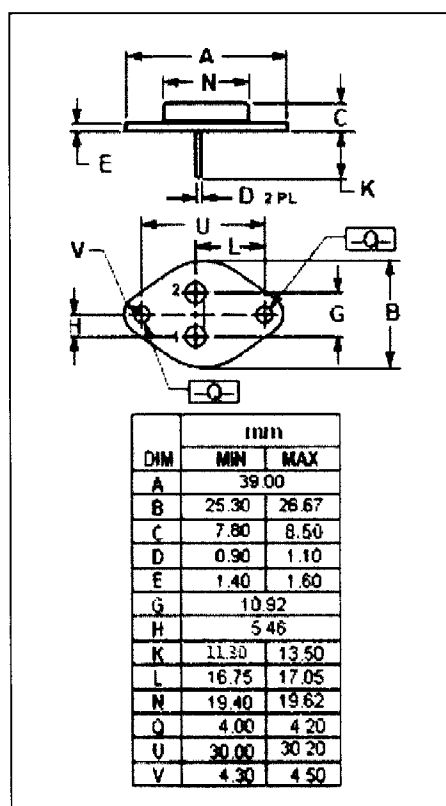
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min})$
- High Power Dissipation-
: $P_C = 100W(\text{Max})@T_C=25^\circ\text{C}$
- Complement to Type 2SD287

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	$^\circ\text{C}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Silicon PNP Power Transistors

2SB539

ELECTRICAL CHARACTERISTICS

Tj=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