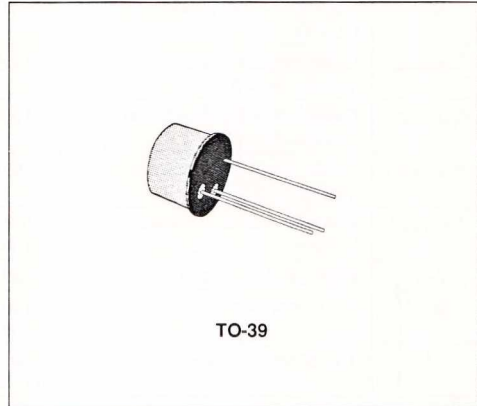


AUDIO AMPLIFIER

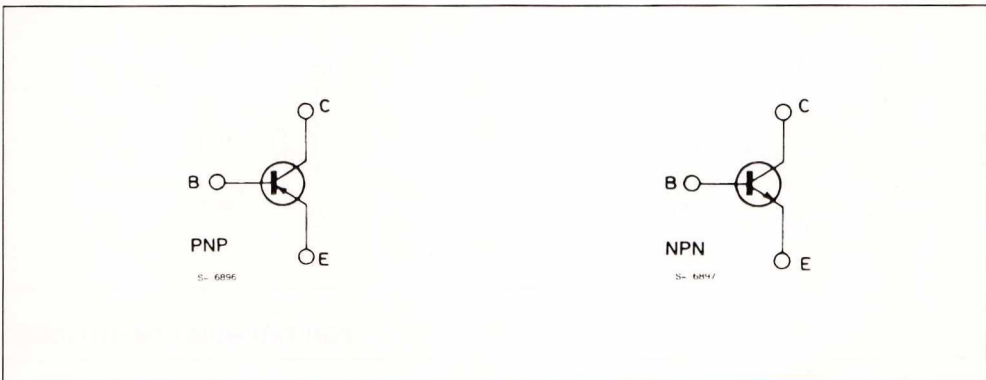
DESCRIPTION

The BC287 is a silicon planar epitaxial PNP transistor in Jedec TO-39 metal case. It is particularly intended for use as audio amplifier.

The complementary NPN type is the BC286.



INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-base Voltage ($I_E = 0$)	- 60	V
V_{CEO}	Collector-emitter Voltage ($I_B = 0$)	- 60	V
V_{EB0}	Emitter-base Voltage ($I_C = 0$)	- 5	V
I_C	Collector Current	- 1	A
P_{tot}	Total Power Dissipation at $T_{amb} \leq 25\text{ }^\circ\text{C}$ at $T_{case} \leq 25\text{ }^\circ\text{C}$	0.75	W
		4	W
T_{stg}, T_j	Storage and Junction Temperature	- 55 to 175	$^\circ\text{C}$

THERMAL DATA

$R_{th\ j-case}$	Thermal Resistance Junction-case	Max	37	$^{\circ}C/W$
$R_{th\ j-amb}$	Thermal Resistance Junction-ambient	Max	200	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\ ^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cutoff Current ($I_E = 0$)	$V_{CB} = -30\ V$		0.1	50	nA
$V_{(BR)CBO}$	Collector-base Breakdown Voltage ($I_E = 0$)	$I_C = -10\ \mu A$	-60			V
$V_{(BR)CEO}^*$	Collector-emitter Breakdown Voltage ($I_B = 0$)	$I_C = -10\ mA$	-60			V
$V_{(BR)EBO}$	Emitter-base Breakdown Voltage ($I_C = 0$)	$I_E = -10\ \mu A$	-5			V
$V_{CE(sat)}^*$	Collector-emitter Saturation Voltage	$I_C = -500\ mA$ $I_B = -50\ mA$ $I_C = -1\ mA$ $I_B = -0.1\ mA$		-0.25 -0.7	-1	V V
V_{BE}^*	Base-emitter Voltage	$I_C = -500\ mA$ $V_{CE} = -2\ V$		-0.93		V
h_{FE}^*	DC Current Gain	$I_C = -100\ mA$ $V_{CE} = -2\ V$ $I_C = -500\ mA$ $V_{CE} = -2\ V$	20	90 60		
f_T	Transition Frequency	$I_C = -50\ mA$ $V_{CE} = -5\ V$ $f = 100\ MHz$		150		MHz
C_{CBO}	Collector-base Capacitance ($I_E = 0$)	$V_{CB} = -10\ V$ $f = 1\ MHz$		13		pF

* Pulsed : pulse duration = 300 μs , duty cycle = 1 %.