



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

BC557

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

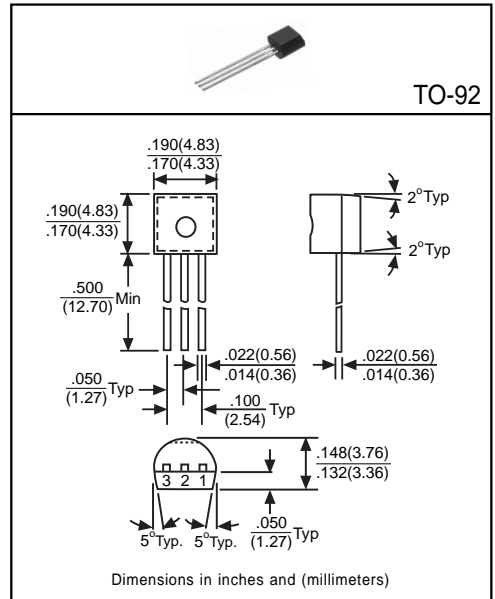
Designed for use in driver stage of audio amplifiers.

Pinning

- 1 = Collector
- 2 = Base
- 3 = Emitter

Absolute Maximum Ratings (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-50	V
Collector-Emitter Voltage	V _{CE0}	-45	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current	I _C	-100	mA
Total Power Dissipation	P _D	500	mW
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-55 to +150	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CB0}	-50	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CE0}	-45	-	-	V	I _C =-1mA
Emitter-Base Breakdown Voltage	BV _{EB0}	-5	-	-	V	I _E =-10μA
Collector Cutoff Current	I _{CB0}	-	-	-0.1	μA	V _{CB} =-20V
Emitter Cutoff Current	I _{EB0}	-	-	-1	μA	V _{EB} =-5V
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)1}	-	-	-300	mV	I _C =-10mA, I _B =-1mA
	V _{CE(sat)2}	-	-	-650	mV	I _C =-100mA, I _B =-10mA
Base-Emitter On Voltage	V _{BE(on)1}	-600	-	-750	mV	I _C =-2mA, V _{CE} =-5V
	V _{BE(on)2}	-	-	-820	mV	I _C =-10mA, V _{CE} =-5V
DC Current Gain ⁽¹⁾	h _{FE}	75	-	800	-	I _C =-2mA, V _{CB} =-5V
Transition Frequency	f _T	-	300	-	MHz	I _C =-10mA, V _{CE} =-5V, f=100MHz
Output Capacitance	C _{ob}	-	4.5	-	pF	V _{CB} =-10V, f=1MHz, I _E =0

(1) Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification of h_{FE}

Rank	A	B	C
Range	75~260	220~500	420~800