



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SB857

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

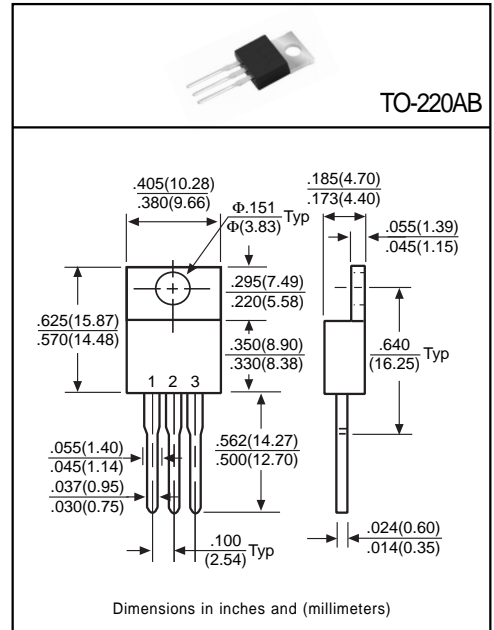
Designed for low frequency power amplifier.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-70	V
Collector-Emitter Voltage	V _{CE0}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current (continuous)	I _C	-4	A
Collector Current (peak)	I _C	-8	A
Total Power Dissipation(T _C =25°C)	P _D	40	W
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}	-70	-	-	V	I _C =-10μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CE0}	-50	-	-	V	I _C =-50mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	-5	-	-	V	I _E =-10μA, I _C =0
Collector Cutoff Current	I _{CBO}	-	-	-1	μA	V _{CB} =-50V, I _E =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	-1	V	I _C =-2A, I _B =-0.2A
Base-Emitter On Voltage ⁽¹⁾	V _{BE(on)}	-	-	-1	V	I _C =-1A, V _{CE} =-4V
DC Current Gain ⁽¹⁾	h _{FE1}	35	-	-	-	I _C =-0.1A, V _{CE} =-4V
	h _{FE2}	60	-	320	-	I _C =-1A, V _{CE} =-4V
Transition Frequency	f _T	-	15	-	MHz	I _C =-500mA, V _{CE} =-4V, f=100MHz

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

Classification of h_{FE2}

Rank	B	C	D
Range	60~120	100~200	160~320