



DC COMPONENTS CO., LTD.
DISCRETE SEMICONDUCTORS

BC856

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

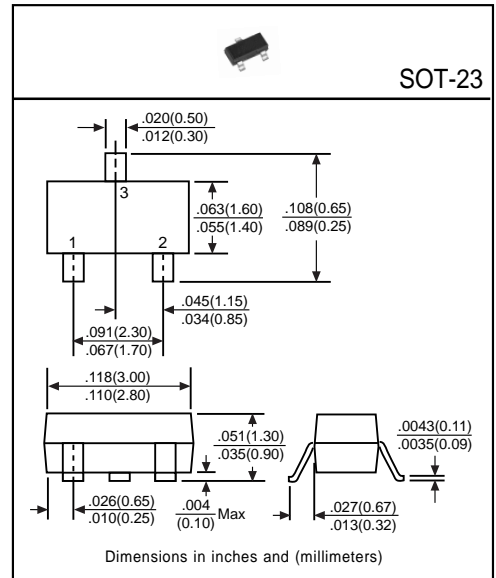
Designed for switching and AF amplifier amplification suitable for automatic insertion in thick and thin-film circuits.

Pinning

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

Absolute Maximum Ratings (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-80	V
Collector-Emitter Voltage	V _{CE0}	-65	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Current	I _C	-100	mA
Total Power Dissipation	P _D	225	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}	-80	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CE0}	-65	-	-	V	I _C =-1mA
Emitter-Base Breakdown Voltage	BV _{EB0}	-5	-	-	V	I _E =-1μA
Collector Cutoff Current	I _{CBO}	-	-	-15	nA	V _{CB} =-30V
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)1}	-	-75	-300	mV	I _C =-10mA, I _B =-0.5mA
	V _{CE(sat)2}	-	-250	-650	mV	I _C =-100mA, I _B =-5mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)1}	-	-700	-	mV	I _C =-10mA, I _B =-0.5mA
	V _{BE(sat)2}	-	-850	-	mV	I _C =-100mA, I _B =-5mA
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 _{CE} =-5V
Transition Frequency	f _T	-	150	-	MHz	I _C =-10mA, V _{CE} =-5V
Output Capacitance	C _{ob}	-	4.5	-	pF	V _{CB} =-10V, f=1MHz

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

Classification of h_{FE}

Rank	A	B	C
Range	125~250	220~475	420~800