



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

DMBT8550

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

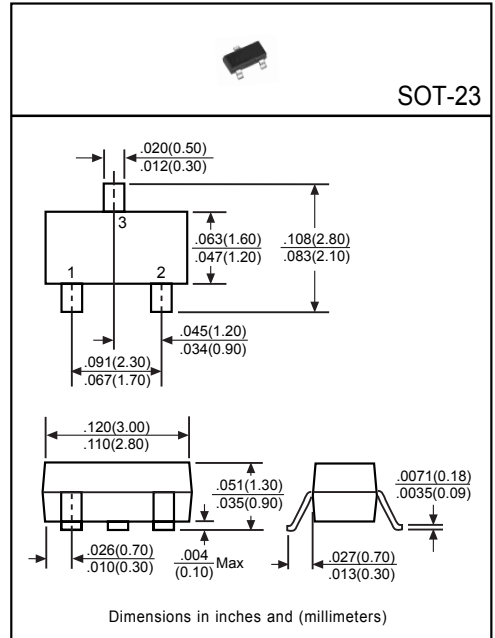
Designed for general purpose amplifier applications.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-25	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	- 500	mA
Total Power Dissipation	P _D	300	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}	-40	-	-	V	I _C =-100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	-25	-	-	V	I _C =-0.1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	-5	-	-	V	I _E =-100μA, I _C =0
Collector Cutoff Current	I _{CB0}	-	-	-1	μA	V _{CB} =-40V, I _E =0
Emitter Cutoff Current	I _{EBO}	-	-	-0.1	μA	V _{EB} =-5V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	-0.5	V	I _C =-500mA, I _B =-50mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	-1.2	V	I _C =-500mA, I _B =-50mA
DC Current Gain ⁽¹⁾	h _{FE}	120	-	400	-	I _C =-100mA, V _{CE} =-1V
Transition Frequency	f _T	100	-	-	MHz	I _C =-50mA, V _{CE} =-10V, f=30MHz

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

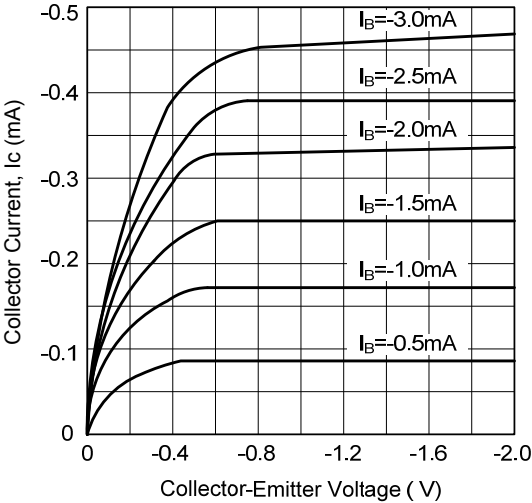
Classification of h_{FE}

Rank	C	D	E
Range	120~200	200-350	300-400

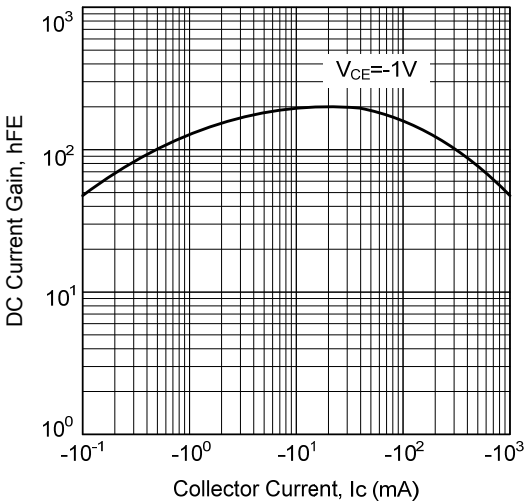
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Electrical Characteristic Curves

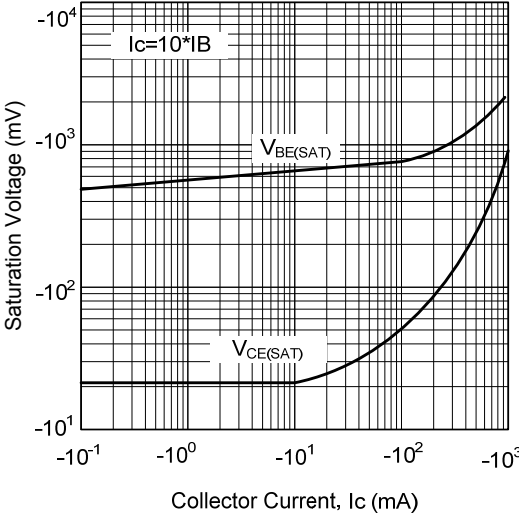
Static Characteristics



DC Current Gain



Saturation Voltage



Current Gain-Bandwidth Product

