



DC COMPONENTS CO., LTD.
DISCRETE SEMICONDUCTORS

DMBT5087

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

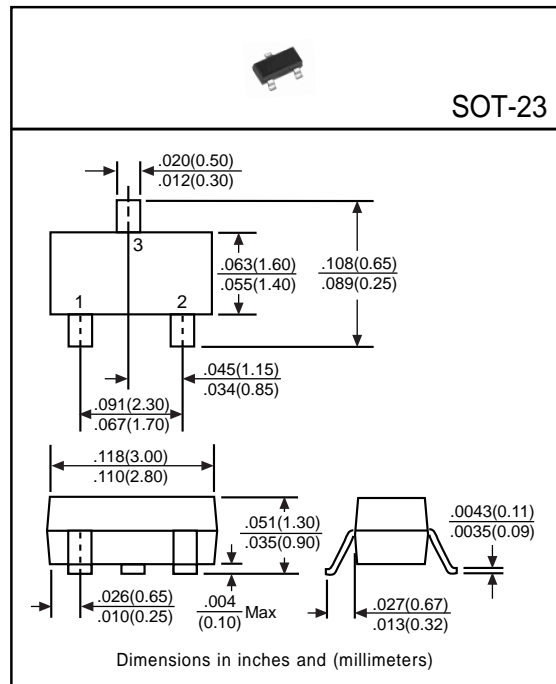
Designed for low noise, high gain, general purpose amplifier applications.

Pinning

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

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-50	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-3	V
Collector Current	I _C	-50	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}	-50	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CEO}	-50	-	-	V	I _C =-1mA
Emitter-Base Breakdown Voltage	BV _{EBO}	-3	-	-	V	I _E =-10μA
Collector Cutoff Current	I _{CB01}	-	-	-10	nA	V _{CB} =-10V
	I _{CB02}	-	-	-50	nA	V _{CB} =-35V
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	-0.3	V	I _C =-10mA, I _B =-1mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	-0.85	V	I _C =-10mA, I _B =-1mA
DC Current Gain ⁽¹⁾	h _{FE1}	250	-	800	-	I _C =-0.1mA, V _{CE} =-5V
	h _{FE2}	250	-	-	-	I _C =-1mA, V _{CE} =-5V
	h _{FE3}	250	-	-	-	I _C =-10mA, V _{CE} =-5V
Transition Frequency	f _T	40	-	-	MHz	I _C =-0.5mA, V _{CE} =-5V, f=100MHz
Output Capacitance	C _{ob}	-	-	4	pF	V _{CB} =-5V, f=100MHz

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