DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

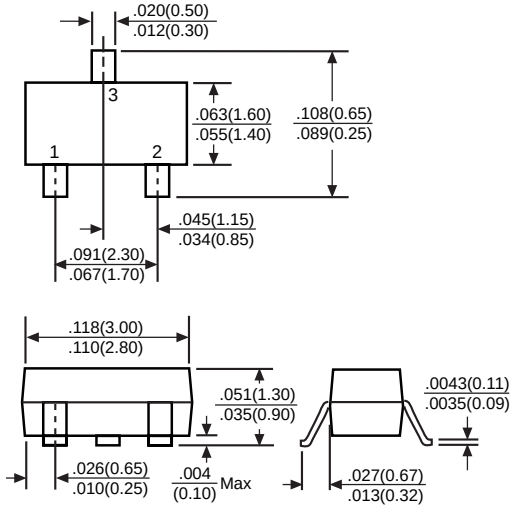
DMBT8550

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

Designed for general purpose amplifier applications.

SOT-23



Dimensions in inches and (millimeters)

Pinning

1 = Base
2 = Emitter
3 = Collector

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-25	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-500	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 Volatge	BV_{CBO}	-25	-	-	V	I_C=-10μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	-20	-	-	V	I_C=-1mA
Emitter-Base Breakdown Volatge	BV_{EBO}	-5	-	-	V	I_E=-10μA
Collector Cutoff Current	I_{CBO}	-	-	-1	μA	V_{CB}=-20V
Emitter Cutoff Current	I_{EBO}	-	-	-0.1	μA	V_{EB}=-3V
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)}$	-	-	-0.6	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=-50mA, V_{CE}=-1V
Transition Frequency	f_T	150	-	-	MHz	I_C=-20mA, V_{CE}=-10V, f=100MHz

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

Classification of h_{FE}

Rank	C	D	E
Range	120~200	150~350	250~400