DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

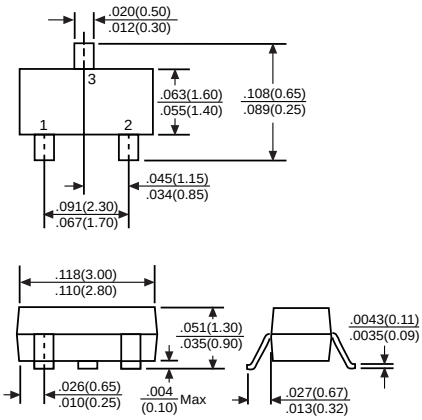
DMBTA55

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}	-60	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-4	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}	-60	-	-	V	I_C=-100μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	-60	-	-	V	I_C=-1mA
Emitter-Base Breakdown Volatge	BV_{EBO}	-4	-	-	V	I_E=-100μA
Collector Cutoff Current	I_{CBO}	-	-	-100	nA	V_{CB}=-60V
	I_{CEO}	-	-	-100	nA	V_{CE}=-50V
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)}$	-	-	-0.25	V	I_C=-100mA, I_B=-10mA
Base-Emitter On Voltage	$V_{BE(on)}$	-	-	-1.2	V	I_C=-100mA, V_{CE}=-1V
DC Current Gain(1)	h_{FE1}	80	-	250	-	I_C=-10mA, V_{CE}=-1V
	h_{FE2}	80	-	-	-	I_C=-100mA, V_{CE}=-1V
Transition Frequency	f_T	50	-	-	MHz	I_C=-100mA, V_{CE}=-1V

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