



DC COMPONENTS CO., LTD.  
DISCRETE SEMICONDUCTORS

DMBTA64

TECHNICAL SPECIFICATIONS OF PNP DARLINGTON TRANSISTOR

Description

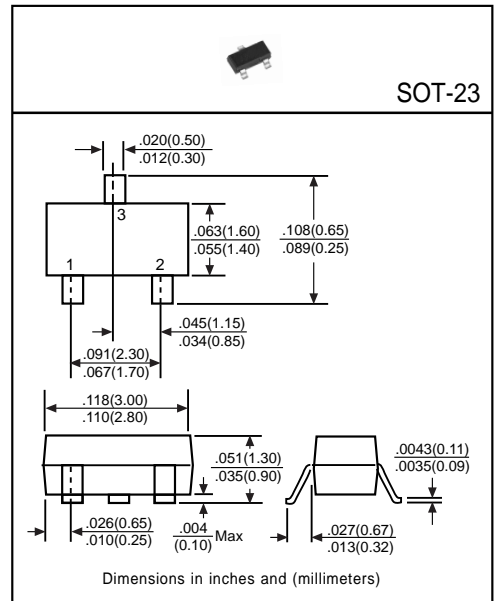
Designed for applications requiring high current gain.

Pinning

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

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	VCBO	-30	V
Collector-Emitter Voltage	VCES	-30	V
Emitter-Base Voltage	VEBO	-10	V
Collector Current	IC	-500	mA
Total Power Dissipation	PD	225	mW
Junction Temperature	TJ	+150	°C
Storage Temperature	TSTG	-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 <sub>CB0</sub>	-30	-	-	V	I <sub>C</sub> =-100μA
Collector-Emitter Breakdown Voltage	BV <sub>CEs</sub>	-30	-	-	V	I <sub>C</sub> =-100μA
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	-10	-	-	V	I <sub>E</sub> =-10μA
Collector Cutoff Current	I <sub>CBO</sub>	-	-	-100	nA	V <sub>CB</sub> =-30V
Emitter Cutoff Current	I <sub>EBO</sub>	-	-	-100	nA	V <sub>EB</sub> =-10V
Collector-Emitter Saturation Voltage <sup>(1)</sup>	V <sub>CE(sat)</sub>	-	-	-1.5	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-0.1mA
Base-Emitter On Voltage	V <sub>BE(on)</sub>	-	-	-2	V	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V
DC Current Gain <sup>(1)</sup>	h <sub>FE1</sub>	10K	-	-	-	I <sub>C</sub> =-10mA, V <sub>CE</sub> =-5V
	h <sub>FE2</sub>	20K	-	-	-	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V
Transition Frequency	f <sub>T</sub>	125	-	-	MHz	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V, f=100MHz

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