



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MJE2955T

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

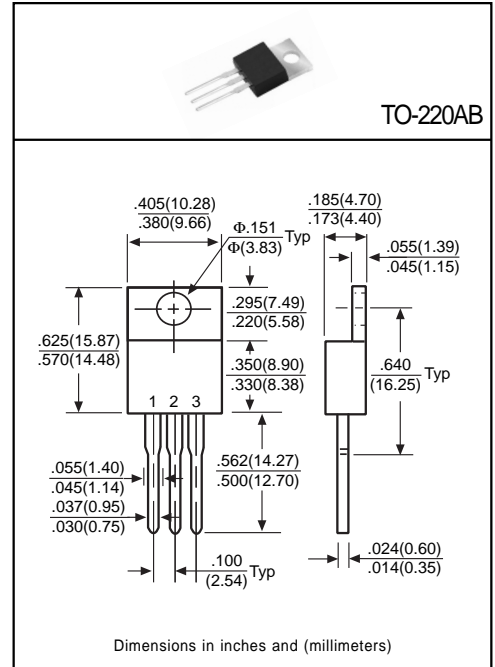
Designed for general purpose amplifier and switching applications.

Pinning

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

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	-70	V
Collector-Emitter Voltage	V <sub>CE0</sub>	-60	V
Emitter-Base Voltage	V <sub>EB0</sub>	-5	V
Collector Current	I <sub>C</sub>	-10	A
Base Current	I <sub>B</sub>	-6	A
Total Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>	75	W
Junction Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-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>	-70	-	-	V	I <sub>C</sub> =-10mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CE0</sub>	-60	-	-	V	I <sub>C</sub> =-200mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	-5	-	-	V	I <sub>E</sub> =-1mA, I <sub>C</sub> =0
Collector Cutoff Current	I <sub>CB0</sub>	-	-	-1	mA	V <sub>CB</sub> =-70V, I <sub>E</sub> =0
	I <sub>CEx</sub>	-	-	-1	mA	V <sub>CE</sub> =-70V, V <sub>EB(off)</sub> =-1.5V
	I <sub>CE0</sub>	-	-	-0.7	mA	V <sub>CE</sub> =-30V, I <sub>B</sub> =0
Emitter Cutoff Current	I <sub>EBO</sub>	-	-	-5	mA	V <sub>EB</sub> =-5V, I <sub>C</sub> =0
Collector-Emitter Saturation Voltage <sup>(1)</sup>	V <sub>CE(sat)1</sub>	-	-	-1.1	V	I <sub>C</sub> =-4A, I <sub>B</sub> =-400mA
	V <sub>CE(sat)2</sub>	-	-	-8	V	I <sub>C</sub> =-10A, I <sub>B</sub> =-3.3A
Base-Emitter On Voltage <sup>(1)</sup>	V <sub>BE(on)</sub>	-	-	-1.8	V	I <sub>C</sub> =-4A, V <sub>CE</sub> =-4V
DC Current Gain <sup>(1)</sup>	h <sub>FE1</sub>	20	-	100	-	I <sub>C</sub> =-4A, V <sub>CE</sub> =-4V
	h <sub>FE2</sub>	5	-	-	-	I <sub>C</sub> =-10A, V <sub>CE</sub> =-4V
Transition Frequency	f <sub>T</sub>	2	-	-	MHz	I <sub>C</sub> =-500mA, V <sub>CE</sub> =-10V, f=0.5MHz

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