



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MPSA56

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

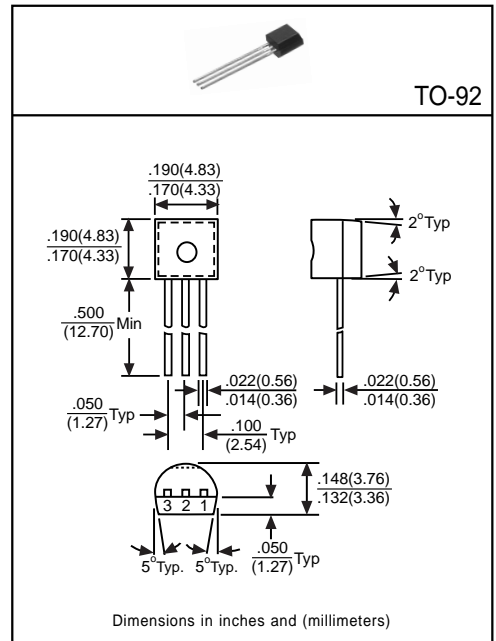
Designed for general purpose amplifier applications.

Pinning

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

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	-80	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-80	V
Emitter-Base Voltage	V <sub>EBO</sub>	-4	V
Collector Current (DC)	I <sub>C</sub>	-500	mA
Collector Current (pulse)	I <sub>C</sub>	-1000	mA
Total Power Dissipation	P <sub>D</sub>	625	mW
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>	-80	-	-	V	I <sub>C</sub> =-100μA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	-80	-	-	V	I <sub>C</sub> =-1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	-4	-	-	V	I <sub>E</sub> =-100μA, I <sub>C</sub> =0
Collector Cutoff Current	I <sub>CB0</sub>	-	-	-0.1	μA	V <sub>CB</sub> =-80V, I <sub>E</sub> =0
	I <sub>CEO</sub>	-	-	-0.1	μA	V <sub>CE</sub> =-60V, I <sub>B</sub> =0
Collector-Emitter Saturation Voltage <sup>(1)</sup>	V <sub>CE(sat)</sub>	-	-	-0.25	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA
Base-Emitter On Voltage <sup>(1)</sup>	V <sub>BE(on)</sub>	-	-	-1.2	V	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-1V
DC Current Gain <sup>(1)</sup>	h <sub>FE1</sub>	50	-	-	-	I <sub>C</sub> =-10mA, V <sub>CE</sub> =-1V
	h <sub>FE2</sub>	50	-	-	-	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-1V
Transition Frequency	f <sub>T</sub>	50	-	-	MHz	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-1V, f=1MHz

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