



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MPSA94

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

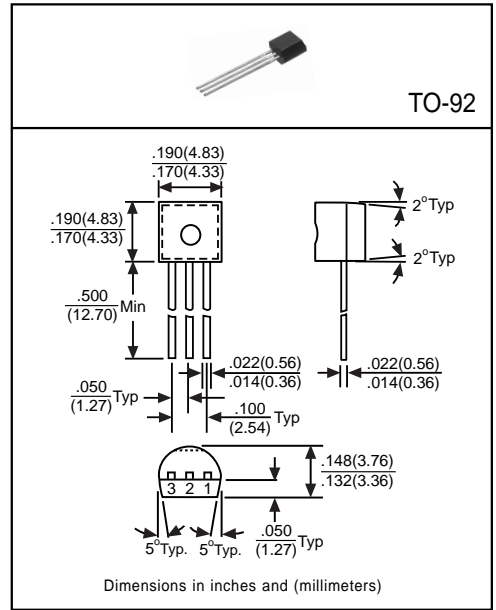
Designed for applications requiring high breakdown voltage.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-400	V
Collector-Emitter Voltage	V _{CEO}	-400	V
Emitter-Base Voltage	V _{EB0}	-6	V
Collector Current	I _C	-500	mA
Total Power Dissipation	P _D	625	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 Voltage	BV _{CB0}	-400	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CEO}	-400	-	-	V	I _C =-1mA
Emitter-Base Breakdown Voltage	BV _{EB0}	-6	-	-	V	I _E =-10μA
Collector Cutoff Current	I _{CBO}	-	-	-100	nA	V _{CB} =-400V
	I _{CES}	-	-	-500	nA	V _{CE} =-400V
Emitter Cutoff Current	I _{EBO}	-	-	-100	nA	V _{EB} =-4V
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)1}	-	-	-0.35	V	I _C =-1mA, I _B =-0.1mA
	V _{CE(sat)2}	-	-	-0.5	V	I _C =-10mA, I _B =-1mA
	V _{CE(sat)3}	-	-	-0.75	V	I _C =-50mA, I _B =-5mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	-0.75	V	I _C =-10mA, I _B =-1mA
DC Current Gain ⁽¹⁾	h _{FE1}	40	-	-	-	I _C =-1mA, V _{CE} =-10V
	h _{FE2}	50	-	300	-	I _C =-10mA, V _{CE} =-10V
	h _{FE3}	45	-	-	-	I _C =-50mA, V _{CE} =-10V
	h _{FE4}	40	-	-	-	I _C =-100mA, V _{CE} =-10V

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