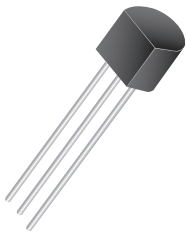
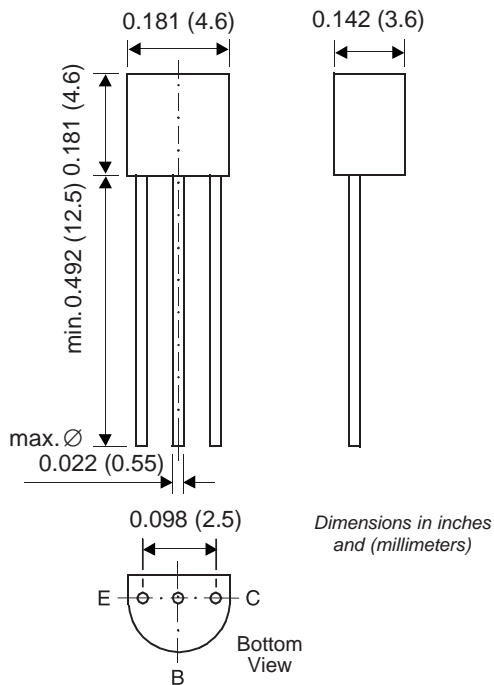


## Small Signal Transistor (PNP)


**TO-226AA (TO-92)**


### Features

- PNP Silicon Epitaxial Planar Transistor for switching and amplifier applications.
- As complementary type, the NPN transistor MPSA06 is recommended.
- On special request, this transistor is also manufactured in the pin configuration TO-18.
- This transistor is also available in the SOT-23 case with the type designation MMBTA56.

### Mechanical Data

**Case:** TO-92 Plastic Package

**Weight:** approx. 0.18g

**Packaging Codes/Options:**

E6/Bulk – 5K per container, 20K/box

E7/4K per Ammo mag., 20K/box

### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$-V_{CBO}$	80	V
Collector-Emitter Voltage	$-V_{CEO}$	80	V
Emitter-Base Voltage	$-V_{EBO}$	4.0	V
Collector Current	$-I_C$	500	mA
Power Dissipation	$P_{tot}$	625 1.5	mW W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	200 <sup>(1)</sup>	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_s$	-55 to +150	°C

**Note:**

(1) Valid provided that leads are kept at ambient temperature.

**Electrical Characteristics** ( $T_J = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
DC Current Gain	$h_{FE}$	$-V_{CE} = 1\text{ V}, -I_C = 10\text{ mA}$ $-V_{CE} = 1\text{ V}, -I_C = 100\text{ mA}$	100 100	— —	— —	—
Collector-Emitter Breakdown Voltage	$-V_{(BR)CEO}$	$-I_C = 1\text{ mA}, I_B = 0\text{ mA}$	80	—	—	V
Emitter-Base Breakdown Voltage	$-V_{(BR)EBO}$	$-I_E = 100\text{ }\mu\text{A}, I_C = 0$	4.0	—	—	V
Collector Saturation Voltage	$-V_{CEsat}$	$-I_C = 100\text{ mA}, -I_B = 10\text{ mA}$	—	—	0.25	V
Base-Emitter ON Voltage	$-V_{BE(on)}$	$-I_C = 10\text{ mA}, -I_B = 1\text{ mA}$	—	—	1.2	V
Collector-Emitter Cut-off Current	$-I_{CES}$	$-V_{CE} = 60\text{ V}, -I_B = 0$	—	—	100	nA
Collector-Base Cut-off Current	$-I_{CBO}$	$-V_{CB} = 80\text{ V}, I_E = 0$	—	—	100	nA
Gain-Bandwidth Product	$f_T$	$-V_{CE} = 1\text{ V}, -I_C = 100\text{ mA}$ $f = 100\text{ MHz}$	50	—	—	MHz



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