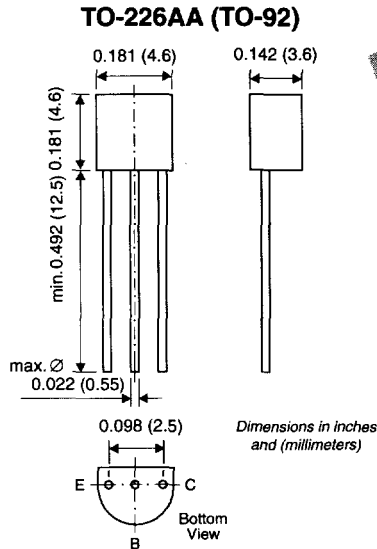


New Product



Features

- NPN Silicon Epitaxial Planar Transistor for switching and amplifier applications.
- As complementary type, the PNP transistor MPSA56 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 MMBTA06.

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}	T _A = 25°C	625	mW
		T _C = 25°C	1.5	W
Thermal Resistance Junction to Ambient Air	R _{θJA}	200 ⁽¹⁾	°C/W	
Junction Temperature	T _j	150	°C	
Storage Temperature Range	T _s	-65 to +150	°C	

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

Small Signal Transistor (NPN)
Electrical Characteristics (TA = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
DC Current Gain	hFE	VCE = 1V, IC = 10mA VCE = 1V, IC = 100mA	100 100	— —	— —	—
Collector-Emitter Breakdown Voltage	V(BR)CEO	IC = 1mA, IB = 0	80	—	—	V
Emitter-Base Breakdown Voltage	V(BR)EBO	IE = 100μA, IC = 0	4.0	—	—	V
Collector Saturation Voltage	VCEsat	IC = 100mA, IB = 10mA	—	—	0.25	V
Base-Emitter ON Voltage	VBE(on)	IC = 10mA, IB = 1mA	—	—	1.2	V
Collector-Emitter Cut-off Current	ICES	VCE = 60V, IB = 0	—	—	100	nA
Collector-Base Cut-off Current	ICBO	VCB = 80V, IE = 0	—	—	100	nA
Gain-Bandwidth Product	ft	VCE = 2.0V, IC = 20mA f = 100MHz	100	—	—	MHz