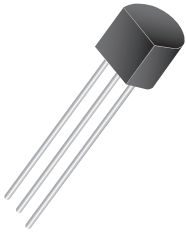
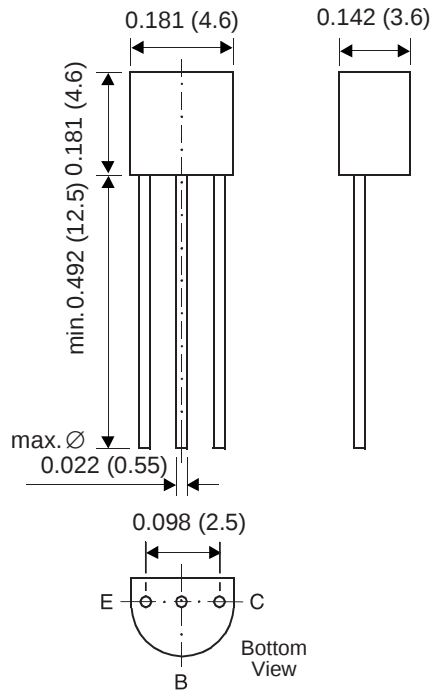


Small Signal Transistors (PNP)



TO-226AA (TO-92)



Dimensions in inches and (millimeters)

Features

- PNP Silicon Epitaxial Planar Transistors
- Complementary to GS9014
- Low frequency, low noise amplifier

Mechanical Data

Case: TO-92 Plastic Package

Weight: approx. 0.18g

Packaging Codes/Options:

E6/Bulk-5K per container, 20K per box

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

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	450 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	250 ⁽¹⁾	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^\circ\text{C}$

Notes:

(1) Valid provided that leads are kept at ambient temperature at a distance of 2mm from case

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Current Gain Group A DC Current Gain B C	h_{FE}	$V_{CE} = -5\text{V}$, $I_C = -1\text{mA}$	60 100 200	— — —	150 300 600	—
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}$, $I_B = 0$	-45	—	—	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$, $I_E = 0$	-50	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}$, $I_C = 0$	-5	—	—	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50\text{V}$, $I_E = 0$	—	—	-50	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$	—	—	-50	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}$, $I_B = -5\text{mA}$	—	-0.2	-0.7	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100\text{mA}$, $I_B = -5\text{mA}$	—	-0.82	-1.0	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = -5\text{V}$, $I_C = -2\text{mA}$	-0.6	-0.65	-0.75	V
Output Capacitance	C_{OB}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$	—	4.5	7.0	pF
Gain-Bandwidth Product	f_T	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$	100	190	—	MHz
Noise Figure	NF	$V_{CE} = -5\text{V}$, $I_C = -0.2\text{mA}$, $f = 1\text{kHz}$, $R_s = 1\text{k}\Omega$	—	0.7	10	dB