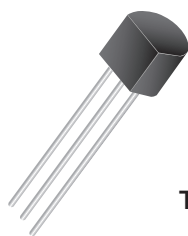
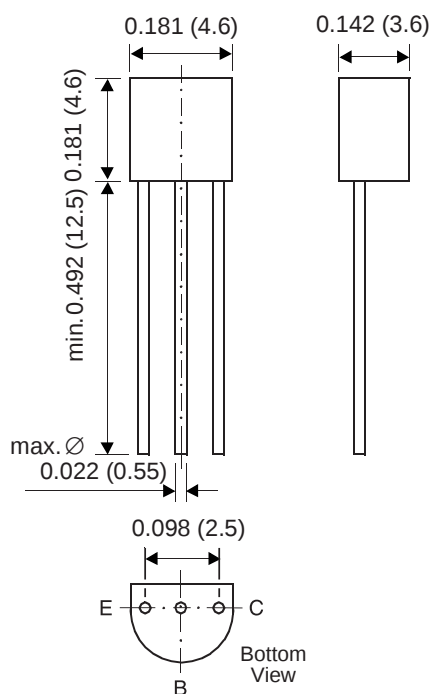


Small Signal Transistor (PNP)



TO-226AA (TO-92)



Dimensions in inches and (millimeters)

Features

- PNP Silicon Epitaxial Planar Transistors for amplifier applications. Especially suitable for low power output stages such as portable radios in class-B push-pull operation.
- Complementary to GS8050xU
- The “x” in the part number can be B, C or D, depending on the current gain.

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}	–40	V
Collector-Emitter Voltage	V_{CEO}	–25	V
Emitter-Base Voltage	V_{EBO}	–6	V
Collector Current	I_C	–800	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	625 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	200 ⁽¹⁾	°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 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
DC Current Gain	h_{FE}	$V_{CE} = -1V, I_C = -5mA$	45	135	—	—
Current Gain Group B C D		$V_{CE} = -1V, I_C = -100mA$	85 120 160	— — —	160 200 300	
		$V_{CE} = -1V, I_C = -800mA$	—	30	—	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -2mA, I_B = 0$	-25	—	—	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-6	—	—	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -35V, I_E = 0$	—	—	-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -6V, I_C = 0$	—	—	-100	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -800mA, I_B = -80mA$	—	-0.51	—	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -800mA, I_B = -80mA$	—	-1.25	—	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = -1V, I_C = -10mA$	—	-0.66	-1.0	V
Output Capacitance	C_{OB}	$V_{CB} = -10V, I_E = 0$ $f = 1\text{ MHz}$	—	15	—	pF
Gain-Bandwidth Product	f_T	$V_{CE} = -10V, I_C = -50mA$	—	100	—	MHz