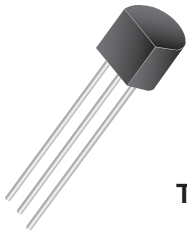
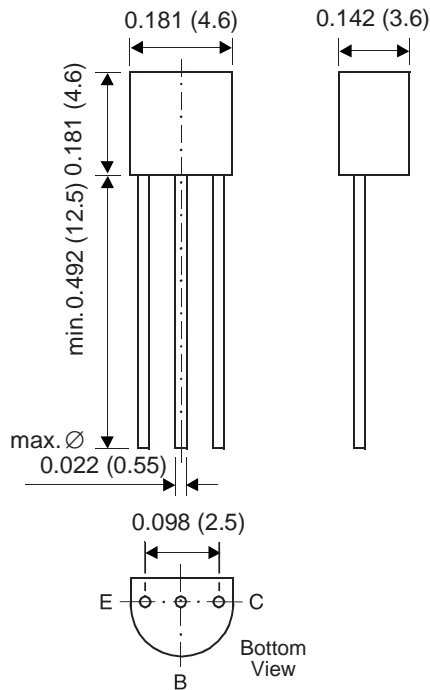


Small Signal Transistor (PNP)


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°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
DC Current Gain Current Gain Group B C D	h _{FE}	V _{CE} = -1V, I _C = -5mA	45	135	—	—
		V _{CE} = -1V, I _C = -100mA	85	—	160	
			120	—	200	
			160	—	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 = -100μA, I _E = 0	-40	—	—	V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E = -100μA, 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 MHz	—	15	—	pF
Gain-Bandwidth Product	f _T	V _{CE} = -10V, I _C = -50mA	—	100	—	MHz