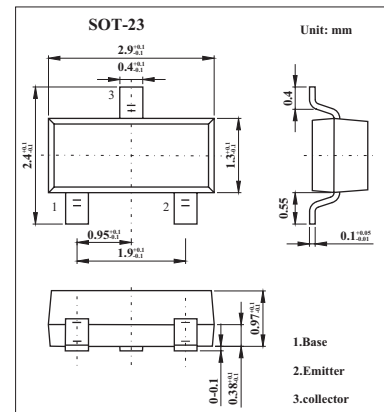


PNP Epitaxial Planar Silicon Transistors

2SA1607

■ Features

- Fast switching speed.
- High gain-bandwidth product.
- Low saturation voltage.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-40	V
Collector-emitter voltage	V_{CE0}	-20	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_C	-150	mA
Collector current (pulse)	I_{CP}	-300	mA
Base current	I_B	-30	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

2SA1607

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	IcBO	V _{CB} = -30V, I _E =0			-0.1	μA
Emitter cutoff current	I _E BO	V _{EB} = -4V, I _C =0			-0.1	μA
DC current gain	h _{FE}	V _{CE} = -1V, I _C = -10mA	60		180	
Gain bandwidth product	f _T	V _{CE} = -10V, I _C = -10mA		400		MHz
Output capacitance	C _{ob}	V _{CB} = -10V, f = 1.0MHz		2.9		pF
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -10mA, I _B = -1mA		-0.07	-0.2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -10mA, I _B = -1mA		-0.75	-1	V
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0	-5			V
Delay time	t _d			14	20	ns
Rise time	t _r			11	20	ns
Storage time	t _{stg}			80	180	ns
Fall time	t _f			16	25	ns

■ hFE Classification

Marking	YL	
	3	4
hFE	60~120	90~180