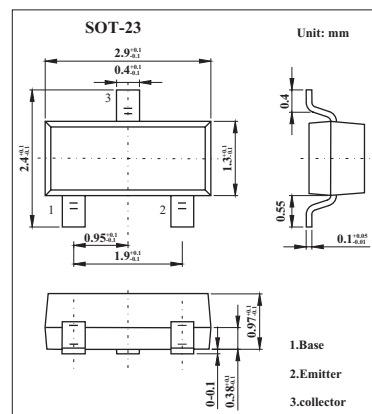


PNP Epitaxial Planar Silicon Transistors

2SA1815

■ Features

- High power gain:PG=25dB typ(f=100MHz)
- High cutoff frequency:fT=750MHz typ
- Low collector-to-emitter saturation voltage



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-15	V
Collector-emitter voltage	V _{CEO}	-12	V
Emitter-base voltage	V _{EB0}	-3	V
Collector current	I _c	-50	mA
Collector dissipation	P _c	250	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cutoff current	I _{cBO}	V _{CB} = -12V, I _E = 0			-0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -2V, I _C = 0			-0.1	μA
DC current Gain	h _{FE}	V _{CE} = -10V, I _C = -5mA	60		270	
Gain bandwidth product	F _t	V _{CE} = -10V, I _C = -5mA		750		MHz
Output Capacitance	C _{ob}	V _{CB} = -10V, f = 1MHz		1.2	1.6	pF
Reverse Transfer Capacitance	C _{ob}	V _{CB} = -10V, f = 1MHz		0.9		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = -10mA, I _B = -1mA		-0.1	-0.3	V
Power Gain	P _G	V _{CE} = -10V, I _C = -10mA, f = 100MHz		25		dB

■ hFE Classification

Marking	JS		
Rank	3	4	5
hFE	60 to 120	90 to 180	135 to 270