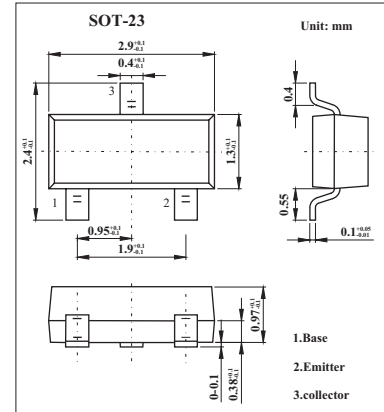


General Purpose Transistor

2SA1037

■ Features

- Excellent hFE linearity.
- PNP silicon transistor



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-60	V
Collector-emitter voltage	V_{CE0}	-50	V
Emitter-base voltage	V_{EB0}	-6	V
Collector current	I_c	-0.15	A
Collector power dissipation	P_c	0.2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_c = -50 \mu\text{A}$	-60			V
Collector-emitter breakdown voltage	V_{CE0}	$I_c = -1\text{mA}$	-50			V
Emitter-base breakdown voltage	V_{EB0}	$I_E = -50 \mu\text{A}$	-6			V
Collector cutoff current	I_{CBO}	$V_{CB} = -60\text{V}$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -6\text{V}$			-0.1	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c/I_B = -50\text{mA}/-5\text{mA}$			-0.5	V
DC current Gain	h_{FE}	$V_{CE} = -6\text{V}, I_c = -1\text{mA}$	120		560	
Output capacitance	C_{ob}	$V_{CB} = -12\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$		4.0	5.0	pF
Transition frequency	f_T	$V_{CE} = -12\text{V}, I_E = 2\text{mA}, f = 30\text{MHz}$		140		MHz

hFE Classification

Marking	FQ	FR	FS
Rank	Q	R	S
hFE	120 270	180 390	270 560