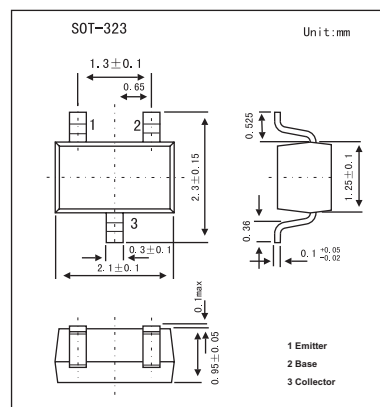


Silicon PNP Epitaxial Planar Type

2SA1748

■ Features

- High transition frequency f_t .
- Small collector output capacitance C_{ob} .

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-50	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_C	-50	mA
Collector power dissipation	P_C	150	mW
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 voltage	V_{CB0}	$I_C = -10 \mu\text{A}$, $I_E = 0$	-50			V
Collector-emitter voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $I_B = 0$	-50			V
Emitter-base voltage	V_{EB0}	$I_E = -10 \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current	I_{CB0}	$V_{CB} = -10 \text{ V}$, $I_E = 0$			-0.1	μA
Emitter-base cutoff current	I_{EB0}	$V_{CE} = -10 \text{ V}$, $I_B = 0$			-100	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10 \text{ V}$, $I_C = -2 \text{ mA}$	200		500	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}$, $I_B = -1 \text{ mA}$		-0.1	-0.3	V
Transition frequency	f_t	$V_{CB} = -10 \text{ V}$, $I_E = 2 \text{ mA}$, $f = 200 \text{ MHz}$		250		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		1.5		pF

■ h_{FE} Classification

Marking	AL	
Rank	Q	R
h_{FE}	200~400	250~500