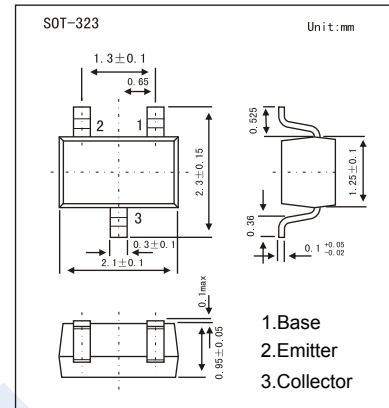


PNP Transistors

2SA1748

■ Features

- High transition frequency f_T .
- Small collector output capacitance C_{ob} .
- Complementary to 2SC4562.

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-50	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 \text{ mA}, R_{BE} = \infty$	-50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -40 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$		-0.1	-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-1.2	V
DC current gain	h_{FE}	$V_{CE} = -10 \text{ V}, I_C = -2 \text{ mA}$	200		500	
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		1.5		pF
Transition frequency	f_T	$V_{CE} = -10 \text{ V}, I_E = 2 \text{ mA}, f = 200 \text{ MHz}$		250		MHz

■ Classification of $h_{FE}(1)$

Type	2SA1748-Q	2SA1748-R
Range	200-400	250-500
Marking	ALQ	ALR

PNP Transistors

2SA1748

■ Typical Characteristics

