

SMD Type

Transistors

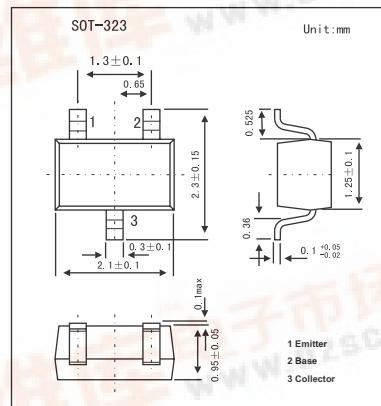
Silicon PNP Epitaxial Planar Type

2SA1532



■ Features

- High transition frequency f_T .

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-30	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	Testconditons	Min	Typ	Max	Unit
Base-emitter saturation voltage	V_{BE}	$V_{CE} = -10 \mu\text{A}, I_C = -1 \text{ mA}$		-0.7		V
Collector-base cutoff current	I_{CBO}	$V_{CB} = -10 \text{ V}, I_E = 0$			-0.1	μA
Collector-emitter cutoff current	I_{CEO}	$V_{CE} = -20 \text{ V}, I_B = 0$			-100	μA
Emitter-base cutoff current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-10	μA
Forward current transfer ratio	h_{FE}	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}$	50	220		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$		-0.1		V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$	150	300		MHz
Noise voltage	NF	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 5 \text{ MHz}$		2.8	4.0	dB
Reverse transfer impedance	Z_{rb}	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 2 \text{ MHz}$		22	60	Ω
Common-emitter reverse transfer capacitance	C_{re}	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 10.7 \text{ MHz}$		1.2	2.0	pF

■ h_{FE} Classification

Marking	E		
Rank	A	B	C
	50~100	70~140	110~220