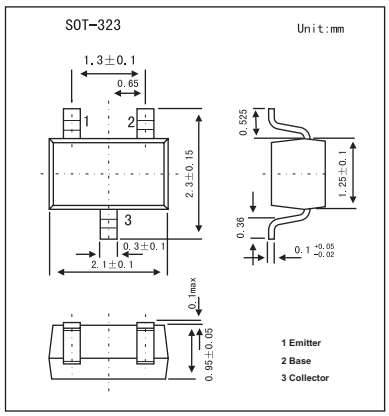
TY Semicondutor®

Product specification

2SA1532



■ Features

- High transition frequency f_T.

■ Absolute Maximum Ratings Ta = 25℃

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	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

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

■ h_{FE} Classification

Marking	E		
Rank	A	B	C
h_{FE}	50～100	70～140	110～220