2SA1512

Silicon PNP epitaxial planer type

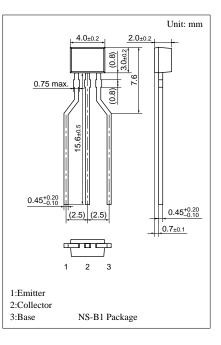
For low-frequency output amplification Complementary to 2SC1788

Features

- Low collector to emitter saturation voltage V_{CE(sat)}.
- Optimum for low-voltage operation and for converters.
- Allowing supply with the radial taping.
- Optimum for high-density mounting.

	-		
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	-25	V
Collector to emitter voltage	V _{CEO}	-20	V
Emitter to base voltage	V _{EBO}	_7	V
Peak collector current	I _{CP}	-1	А
Collector current	I _C	- 0.5	А
Collector power dissipation	P _C	300	mW
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

Absolute Maximum Ratings (Ta=25°C)



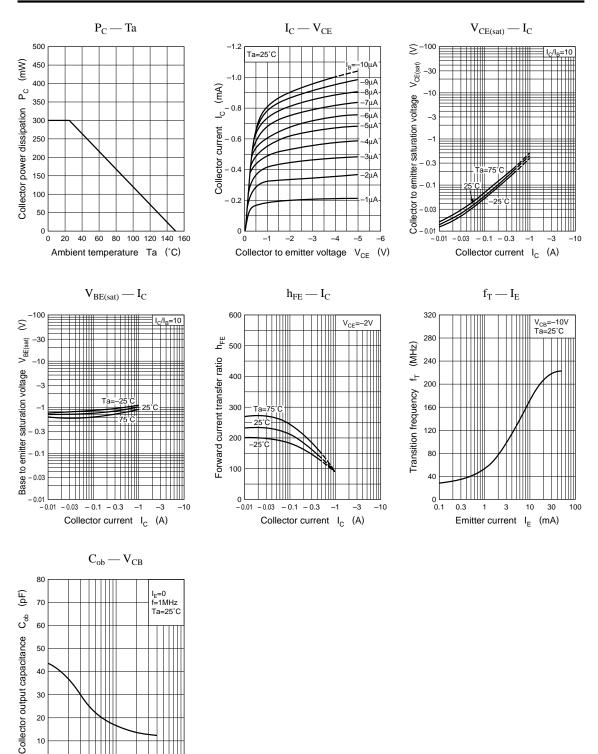
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = -25V, I_E = 0$			-100	nA
	I _{CEO}	$V_{CE} = -20V, I_B = 0$			-1	μΑ
Collector to base voltage	V _{CBO}	$I_C=-10\mu A,I_E=0$	-25			V
Collector to emitter voltage	V _{CEO}	$I_C = -1 mA, I_B = 0$	-20			V
Emitter to base voltage	V _{EBO}	$I_{\rm E} = -10 \mu A, I_{\rm C} = 0$	-7			V
Forward current transfer ratio	h _{FE1} *1	$V_{CE} = -2V, I_C = -0.5A^{*2}$	90		220	
	h _{FE2}	$V_{CE} = -2V, I_C = -1A^{*2}$	25			
Collector to emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -500 {\rm mA}, I_{\rm B} = -50 {\rm mA}^{*2}$			-0.4	V
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = -500 \text{mA}, I_B = -50 \text{mA}^{*2}$			-1.2	V
Transition frequency	f_T	$V_{CB} = -10V, I_E = 50mA, f = 200MHz$		150		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		15	25	pF

*2 Pulse measurement

*1hFE1 Rank classification

Rank	Q	R
h _{FE1}	90 ~ 155	130 ~ 220



20 10

0 ∟ −1

-3

-10

Collector to base voltage V_{CB} (V)

-30

-100

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