

2SC4562

Silicon NPN epitaxial planer type

For high-frequency amplification

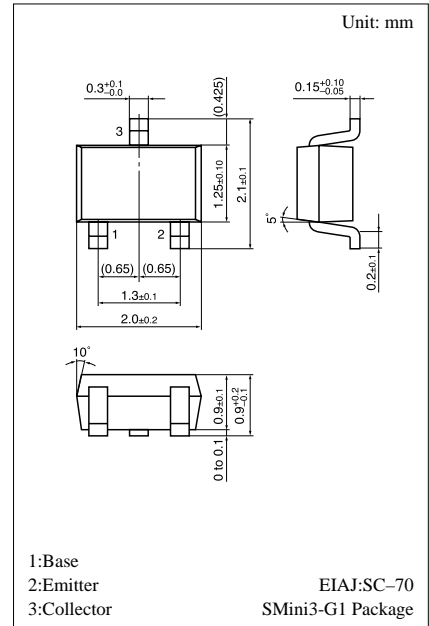
Complementary to 2SA1748

Features

- High transition frequency f_T .
- Small collector output capacitance C_{ob} .
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rated	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	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 ~ +150	$^\circ\text{C}$



Marking symbol : AM

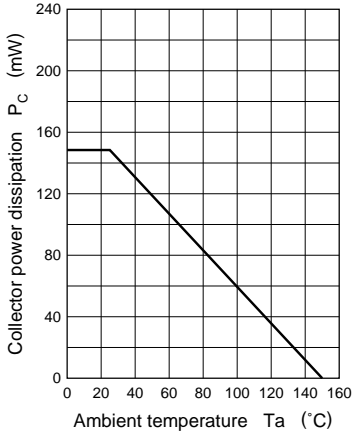
Electrical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 10\text{V}, I_E = 0$			0.1	μA
	I_{CEO}	$V_{CE} = 10\text{V}, I_B = 0$			100	μA
Collector to base voltage	V_{CBO}	$I_C = 10\mu\text{A}, I_E = 0$	50			V
Collector to emitter voltage	V_{CEO}	$I_C = 1\text{mA}, I_B = 0$	50			V
Emitter to base voltage	V_{EBO}	$I_E = 10\mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	h_{FE}^*	$V_{CE} = 10\text{V}, I_C = 2\text{mA}$	200		500	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.06	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

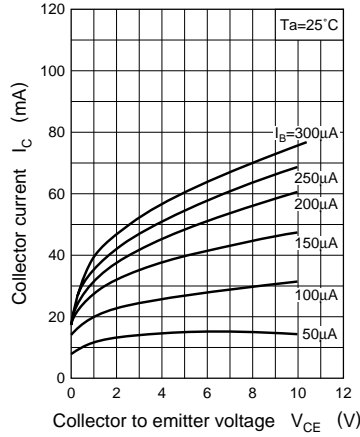
* h_{FE} Rank classification

Rank	Q	R
h_{FE}	200 ~ 400	250 ~ 500
Marking Symbol	AMQ	AMR

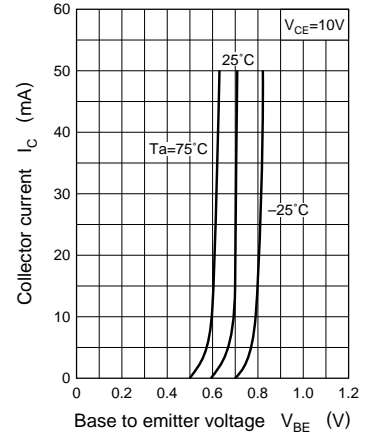
$P_C - T_a$



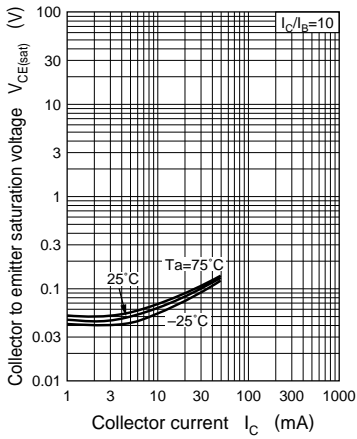
$I_C - V_{CE}$



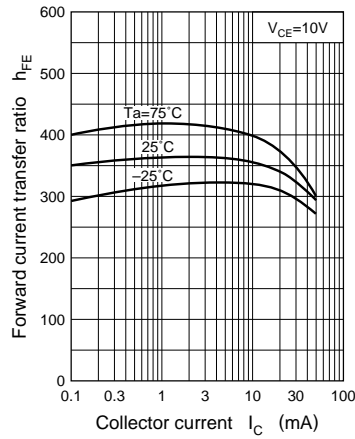
$I_C - V_{BE}$



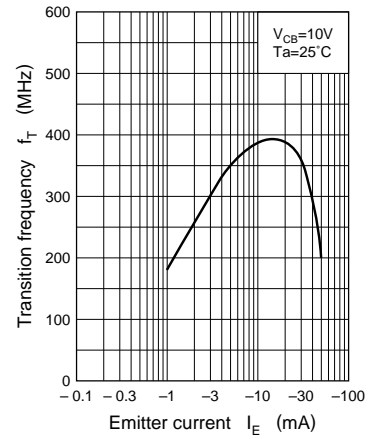
$V_{CE(sat)} - I_C$



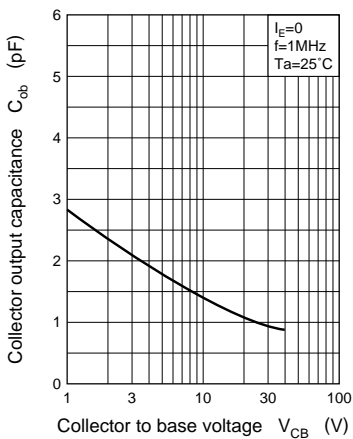
$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$



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