2SC4562

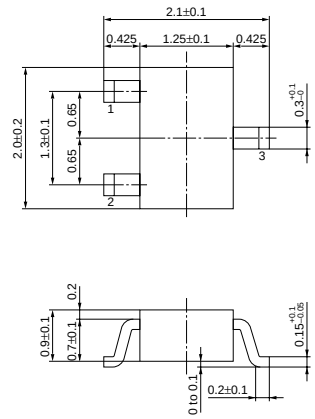
Silicon NPN epitaxial planer type

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.

Unit: mm



1:Base
2:Emitter EIAJ:SC–70
3:Collector S–Mini Type Package

Marking symbol : AM

Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	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	˚C
Storage temperature	T_{stg}	–55 ~ +150	˚C

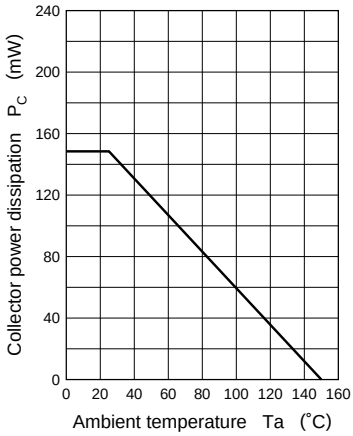
Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 10V, I_E = 0			0.1	µA
	I_{CEO}	V_{CE} = 10V, I_B = 0			100	µA
Collector to base voltage	V_{CBO}	I_C = 10µA, I_E = 0	50			V
Collector to emitter voltage	V_{CEO}	I_C = 1mA, I_B = 0	50			V
Emitter to base voltage	V_{EBO}	I_E = 10µA, I_C = 0	5			V
Forward current transfer ratio	h_{FE}*	V_{CE} = 10V, I_C = 2mA	200		500	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 10mA, I_B = 1mA		0.06	0.3	V
Transition frequency	f_T	V_{CB} = 10V, I_E = –2mA, f = 200MHz		250		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz		1.5		pF

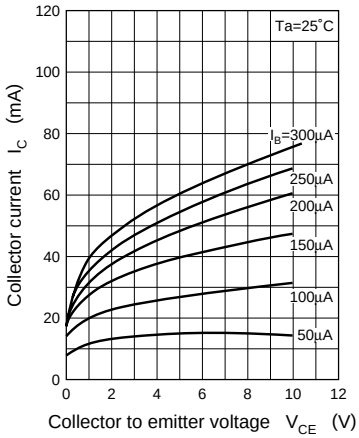
*h_{FE} Rank classification

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

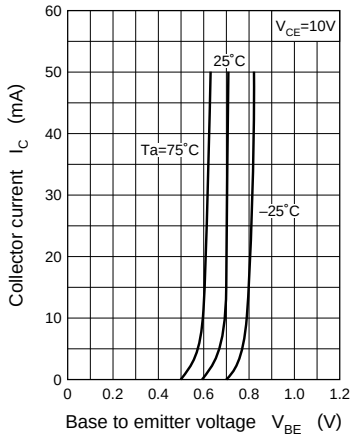
P_C — Ta



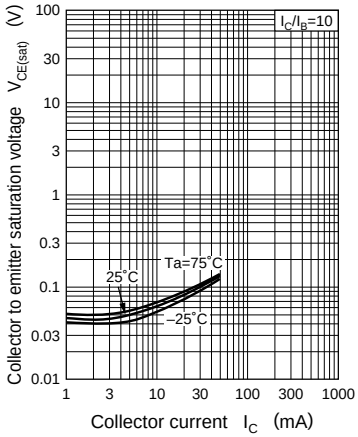
I_C — V_{CE}



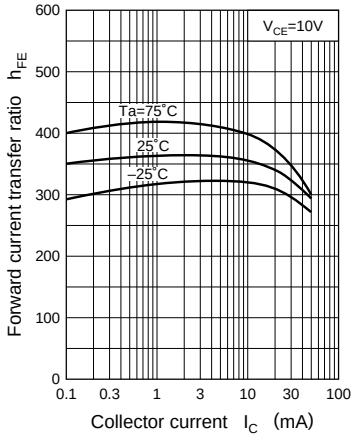
I_C — V_{BE}



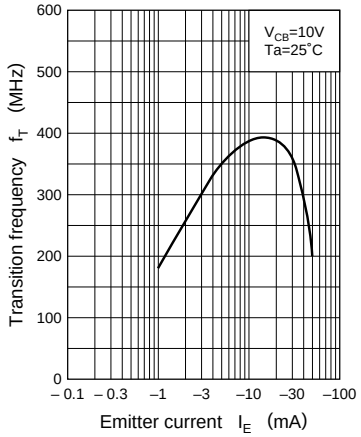
$V_{CE(sat)}$ — I_C



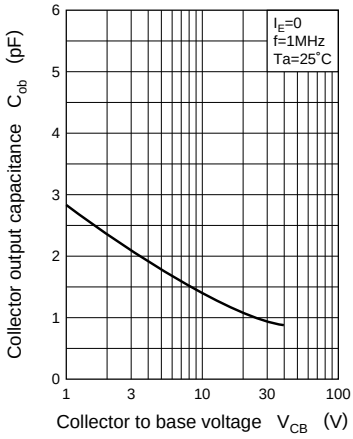
h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}



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