2SA1791

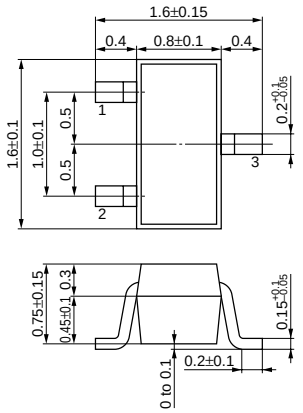
Silicon PNP epitaxial planer type

For high-frequency amplification
Complementary to 2SC4656

Features

- High transition frequency f_T.
- Small collector output capacitance C_{ob}.
- SS-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
3:Collector

EIAJ:SC–75
SS–Mini Type Package

Marking symbol : AL

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	125	mW
Junction temperature	T_j	125	˚C
Storage temperature	T_{stg}	–55 ~ +125	˚C

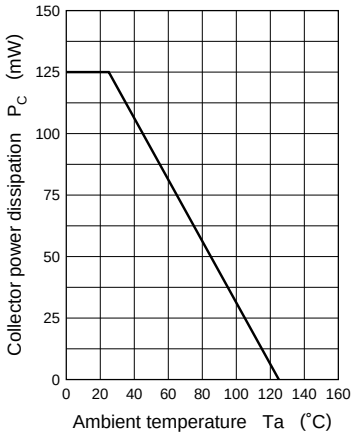
Electrical Characteristics (Ta=25˚C)

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		– 0.1	– 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

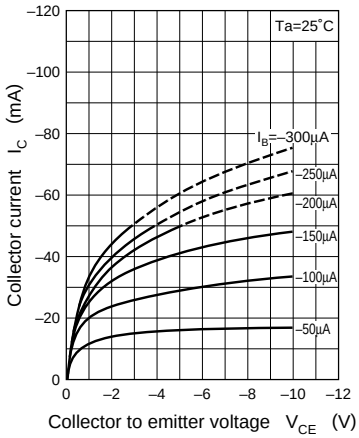
*h_{FE} Rank classification

Rank	Q	R
h_{FE}	200 ~ 400	250 ~ 500
Marking Symbol	ALQ	ALR

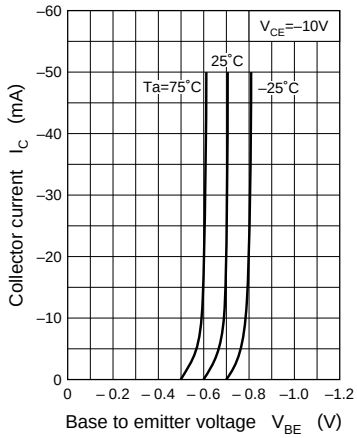
P_C — Ta



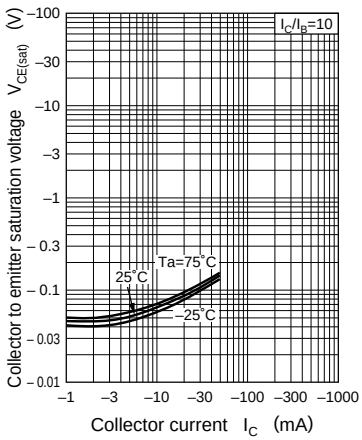
I_C — V_{CE}



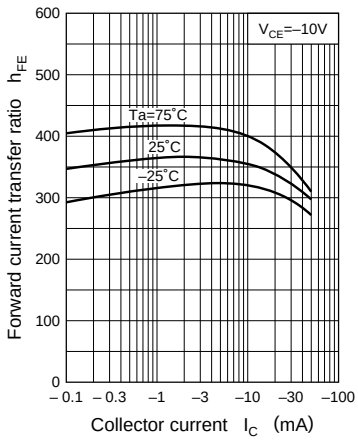
I_C — V_{BE}



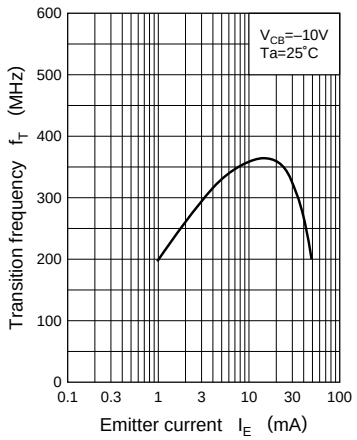
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}