2SB792, 2SB792A

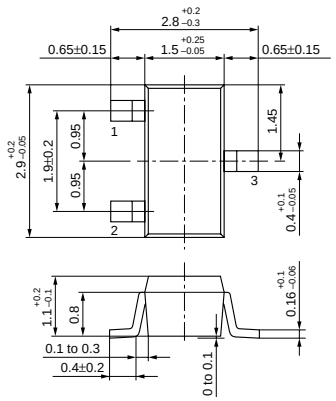
Silicon PNP epitaxial planer type

For high breakdown voltage low-noise amplification
Complementary to 2SD814

Features

- High collector to emitter voltage V_{CEO}.
- Low noise voltage NV.
- 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
JEDEC:TO–236
EIAJ:SC–59
Mini Type Package

Marking symbol : I(2SB792)
2F(2SB792A)

Absolute Maximum Ratings (Ta=25˚C)

Parameter		Symbol	Ratings	Unit
Collector to base voltage	2SB792	V_{CBO}	–150	V
	2SB792A		–185	
Collector to emitter voltage	2SB792	V_{CEO}	–150	V
	2SB792A		–185	
Emitter to base voltage		V_{EBO}	–5	V
Peak collector current		I_{CP}	–100	mA
Collector current		I_C	–50	mA
Collector power dissipation		P_C	200	mW
Junction temperature		T_j	150	˚C
Storage temperature		T_{stg}	–55 ~ +150	˚C

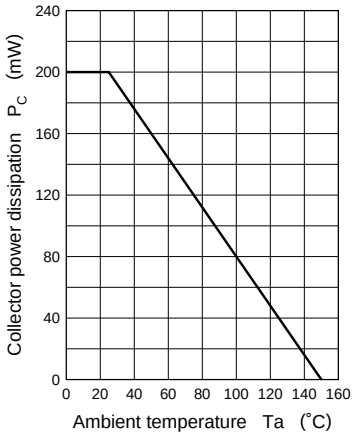
Electrical Characteristics (Ta=25˚C)

Parameter		Symbol	Conditions	min	typ	max	Unit
Collector cutoff current		I_{CBO}	V_{CB} = –100V, I_E = 0			–1	μA
Collector to emitter voltage	2SB792	V_{CEO}	I_C = –100μA, I_B = 0	–150			V
	2SB792A			–185			
Emitter to base voltage		V_{EBO}	I_E = –10μA, I_C = 0	–5			V
Forward current transfer ratio	2SB792	h_{FE}*	V_{CE} = –5V, I_C = –10mA	130		450	
	2SB792A			130		330	
Collector to emitter saturation voltage		$V_{CE(sat)}$	I_C = –30μA, I_B = –3mA			–1	V
Transition frequency		f_T	V_{CB} = –10V, I_E = 10mA, f = 200MHz		200		MHz
Collector output capacitance		C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz		4		pF
Noise voltage		NV	V_{CE} = –10V, I_C = –1mA, G_V = 80dB, R_g = 100kΩ, Function = FLAT		150		mV

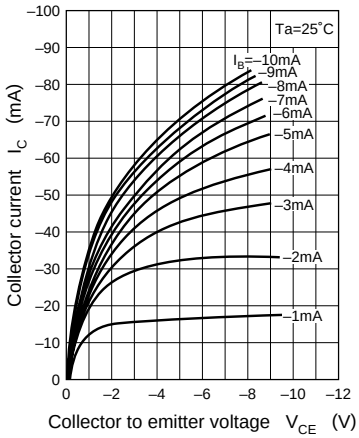
*h_{FE} Rank classification

Rank		R	S	T
h_{FE}		130 ~ 220	185 ~ 330	260 ~ 450
Marking Symbol	2SB792	IR	IS	IT
	2SB792A	2FR	2FS	—

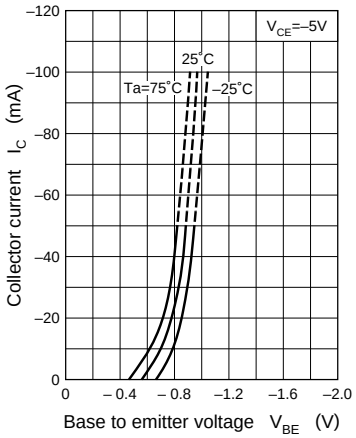
P_C — Ta



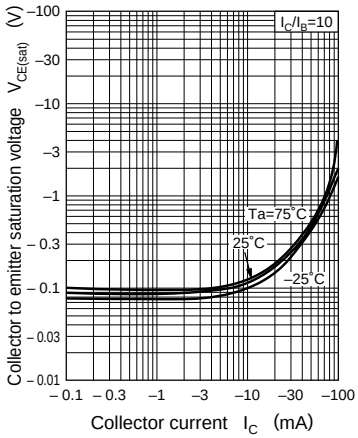
I_C — V_{CE}



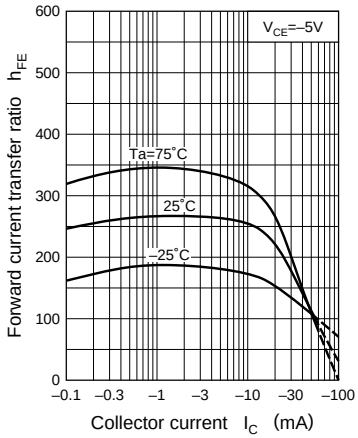
I_C — V_{BE}



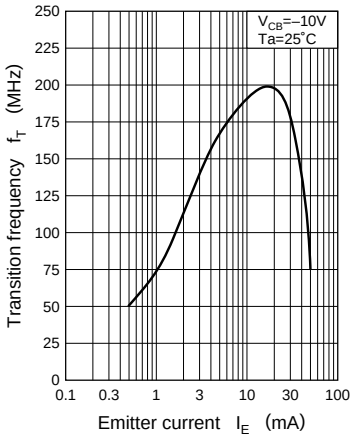
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}