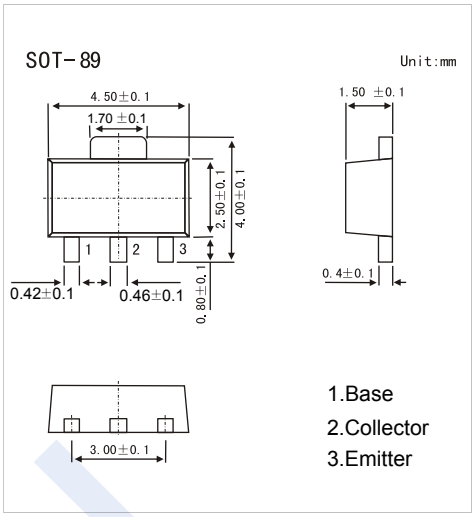
PNP Transistors

2SB956-HF



■ Features

- Large collector power dissipation P_C.
- Low collector to emitter saturation voltage $V_{CE(sat)}$.
- Complementary to 2SD1280-HF
- Pb−Free Package May be Available. The G−Suffix Denotes a Pb−Free Lead Finish

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-20	V
Collector - Emitter Voltage	V_{CEO}	-20	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-1	A
Collector current -Pulse	I_{CP}	-2	
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-20			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-20			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -20V , I_E=0			-1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1 A, I_B=-50mA			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-500 mA, I_B=-50mA			-1.2	
DC current gain	$h_{FE(1)}$	V_{CE}= -2V, I_C= -500mA	130		280	
	$h_{FE(2)}$	V_{CE}= -2V, I_C= -1.5 A	50			
Collector output capacitance	C_{ob}	V_{CB} = –6V, I_E = 0, f = 1MHz		40		pF
Transition frequency	f_T	V_{CE}= -6V, I_E= 50mA,f=200MHz		200		MHz

■ Classification of $h_{fe(1)}$

Type	2SB956-R-HF	2SB956-S-HF
Range	130-210	180-280
Marking	HR F	HS F

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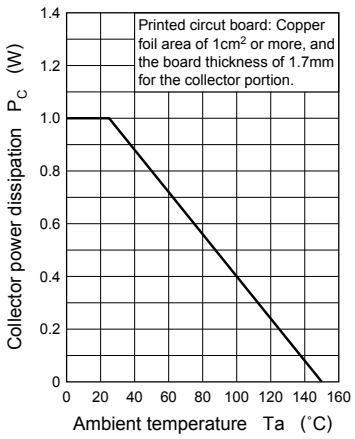
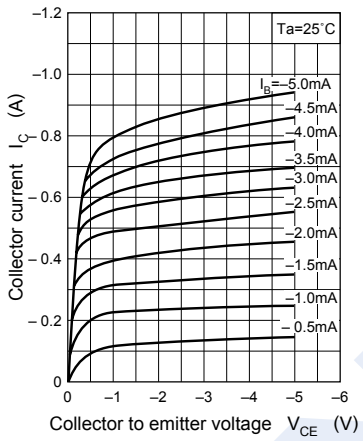
■ Typical Characterisitics

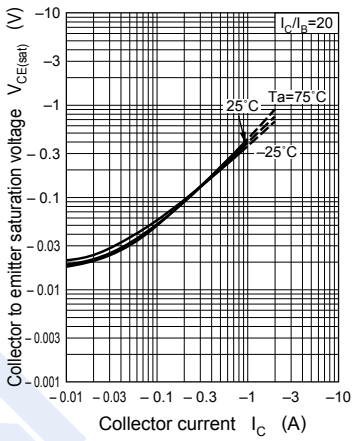
P_C — Ta



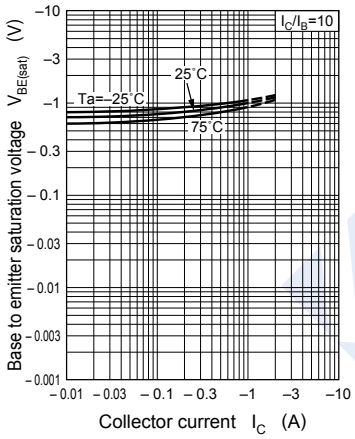
I_C — V_{CE}



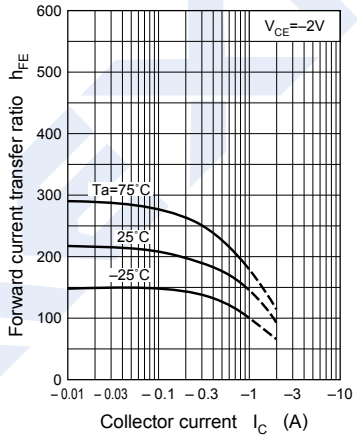
$V_{CE(sat)}$ — I_C



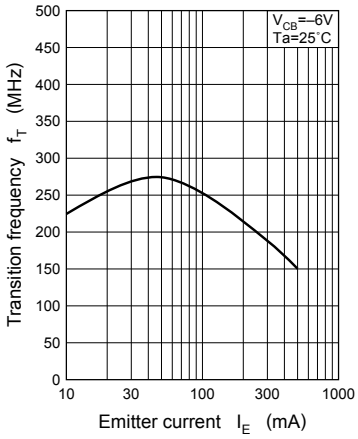
$V_{BE(sat)}$ — I_C



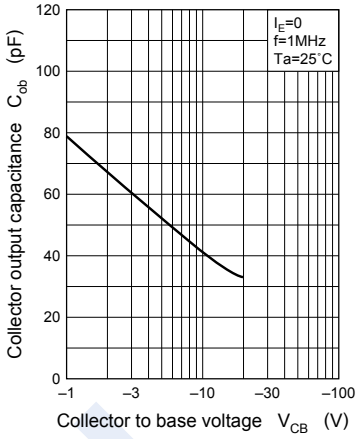
h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}



Area of safe operation (ASO)