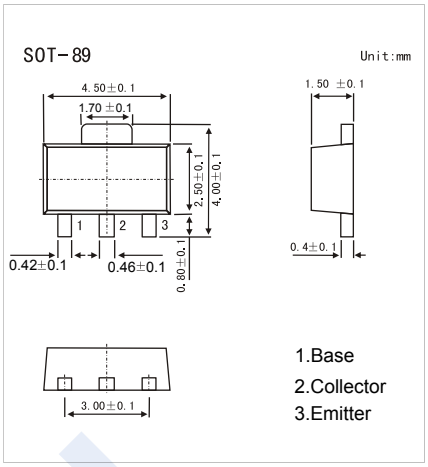
PNP Transistors

2SB806-HF



■ Features

- High collector to emitter voltage: V_{CEO} = -120V.
- 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}	-120	V
Collector-emitter voltage	V_{CEO}	-120	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-0.7	A
Collector current (pulse) *1	$I_{C(pu)}$	-1.2	A
Collector power dissipation	P_C	2	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

*1. PW≤10ms,duty cycle≤50%

■ 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	-120			V
Collector- emitter breakdown voltage	V_{CEO}	I_C=- 1 mA, I_B= 0	-120			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μA, I_C= 0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -120 V , I_E= 0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-0.1	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=-500 mA, I_B=-50mA			-0.6	V
Base - emitter saturation voltage *	$V_{BE(sat)}$	I_C=-500 mA, I_B=-50mA			-1.5	
Base - emitter voltage *	V_{BE}	V_{CE}= -10V, I_C= -10mA	-0.55		-0.68	
DC current gain *	h_{FE}	V_{CE}= -1V, I_C= -100mA	90	200	400	
		V_{CE}= -1V, I_C= -5mA	45	200		
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E=0,f=1MHz		14		pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -10mA		75		MHz

* PW≤350μs,duty cycle≤2%

■ h_{FE} Classification(1)

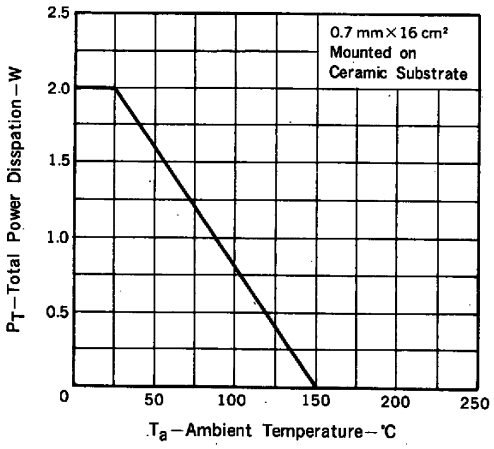
Type	2SB806-R-HF	2SB806-Q-HF	2SB806-P-HF
Range	90-180	135-270	200-400
Marking	KR F	KQ F	KP F

PNP Transistors

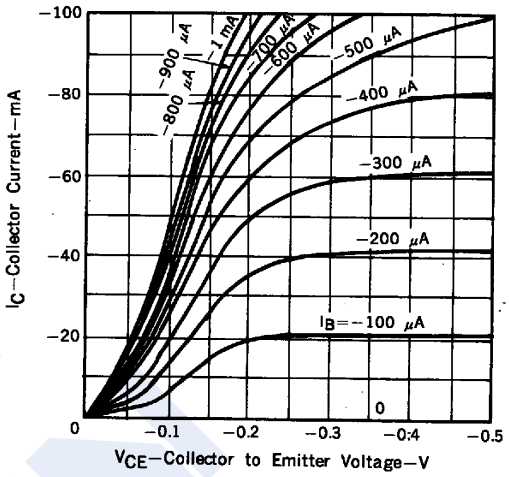
2SB806-HF

■ Typical Characterisitics

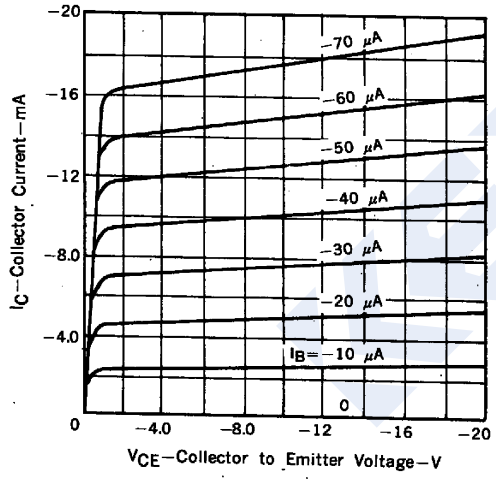
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



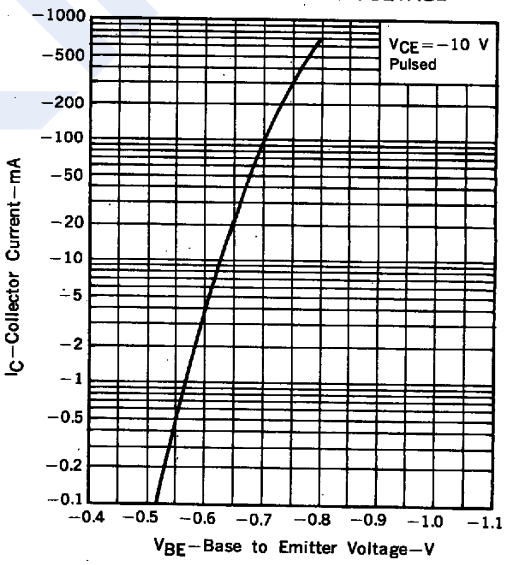
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



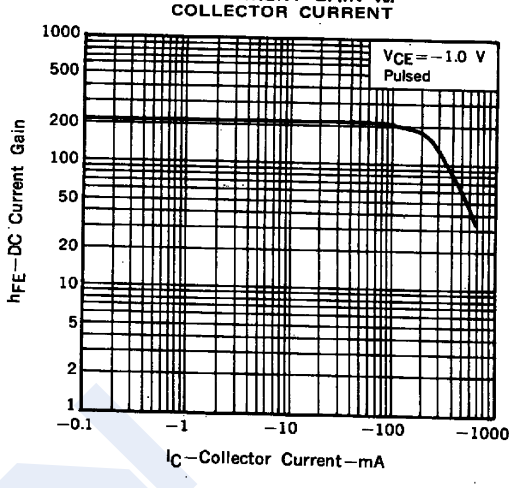
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



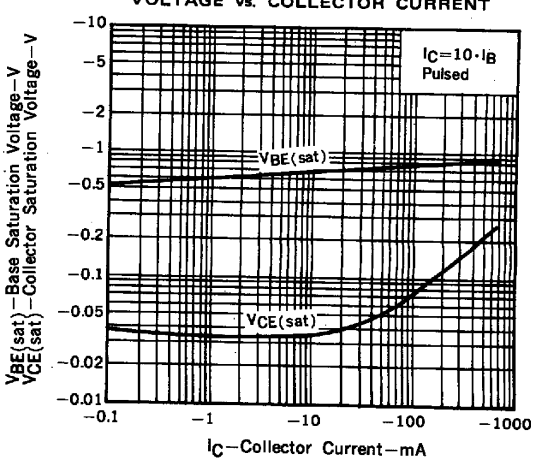
COLLECTOR CURRENT vs. BASE TO EMITTER VOLTAGE



DC CURRENT GAIN vs. COLLECTOR CURRENT



BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



PNP Transistors

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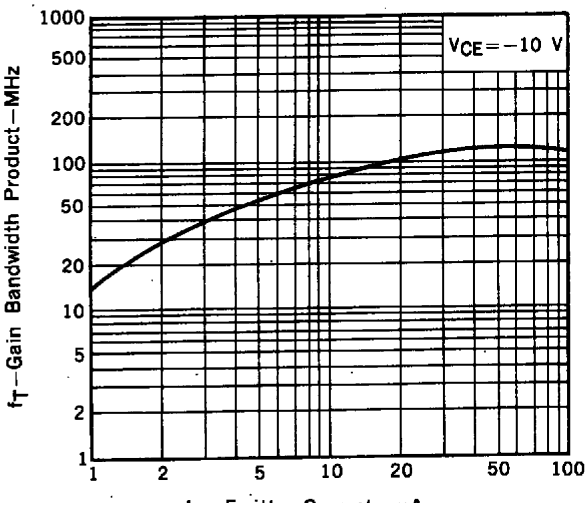
■ Typical Characterisitics

GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. REVERSE VOLTAGE