



FP208

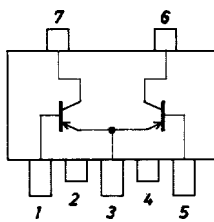
PNP Epitaxial Planar Silicon Transistor

Driver Applications

Features

- Composite type with 2 PNP transistors in one package, facilitating high-density mounting.
- The FP208 is composed of 2 chips each equivalent to the 2SB1121.

Electrical Connection

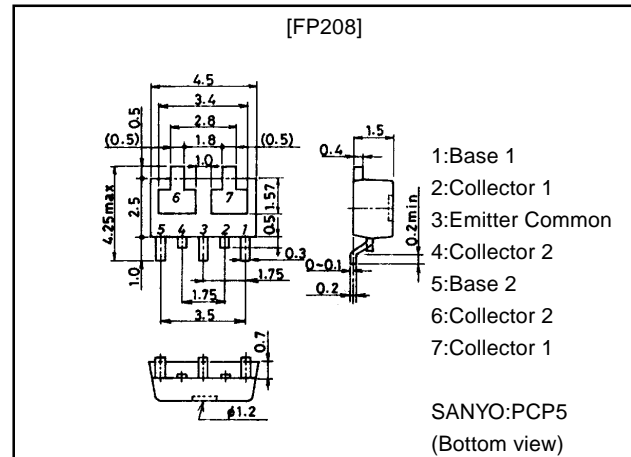


- 1:Base 1
2:Collector 1
3:Emitter Common
4:Collector 2
5:Base 2
6:Collector 2
7:Collector 1
(Top view)

Package Dimensions

unit:mm

2097B



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		-30	V
Collector-to-Emitter Voltage	V_{CEO}		-25	V
Emitter-to-Base Voltage	V_{EBO}		-6	V
Collector Current	I_C		-2	A
Collector Current (Pulse)	I_{CP}		-5	A
Collector Dissipation	P_C		0.8	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm ² ×0.8mm) 1unit	1.1	W
Base Current	I_B	Mounted on ceramic board (250mm ² ×0.8mm)	-400	mA
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

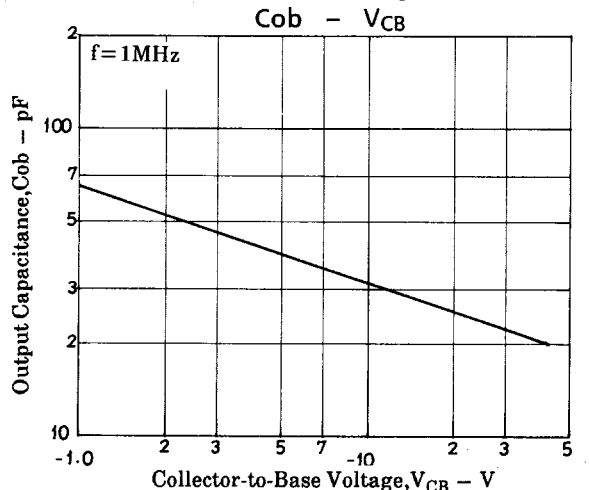
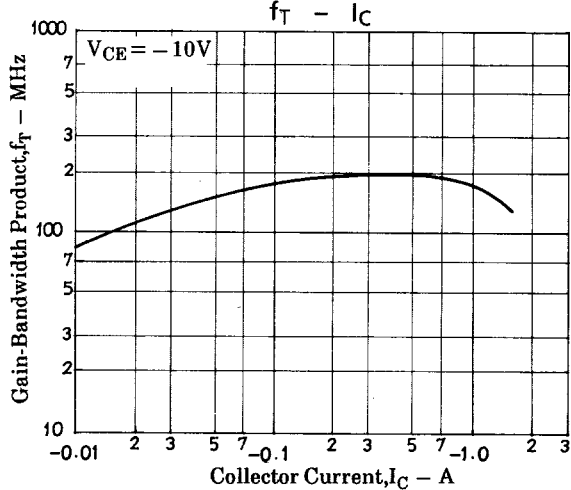
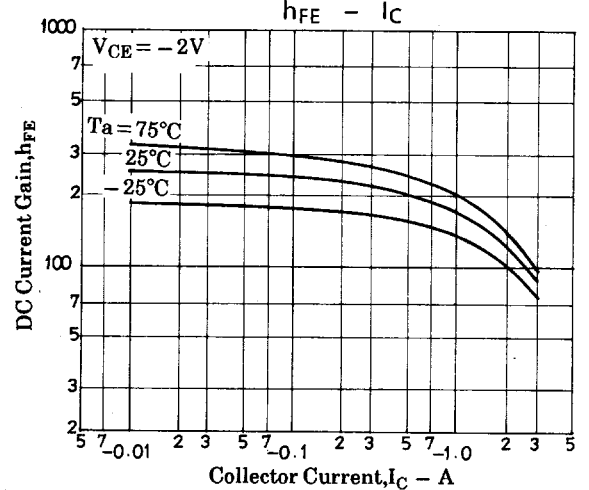
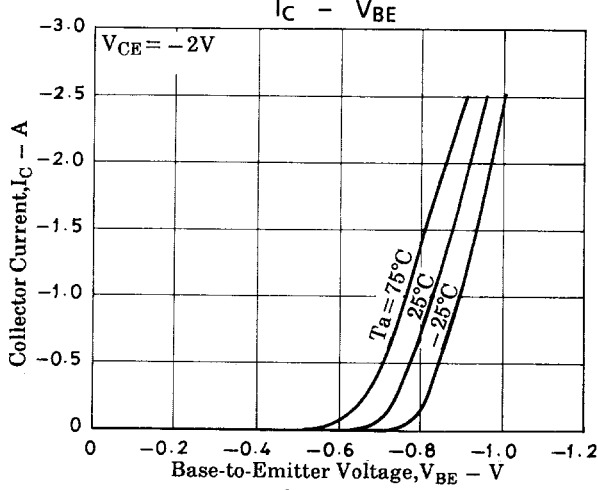
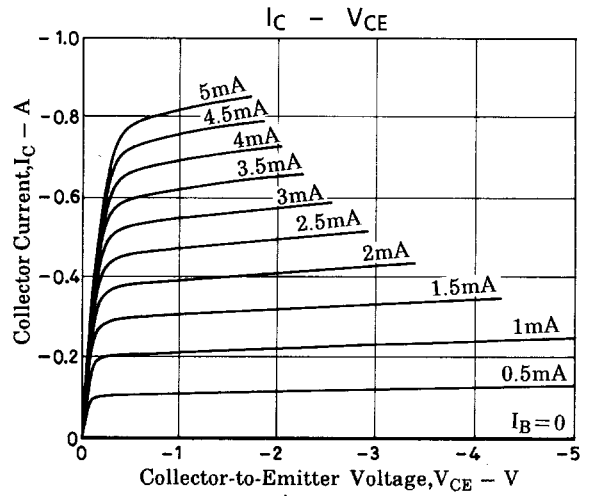
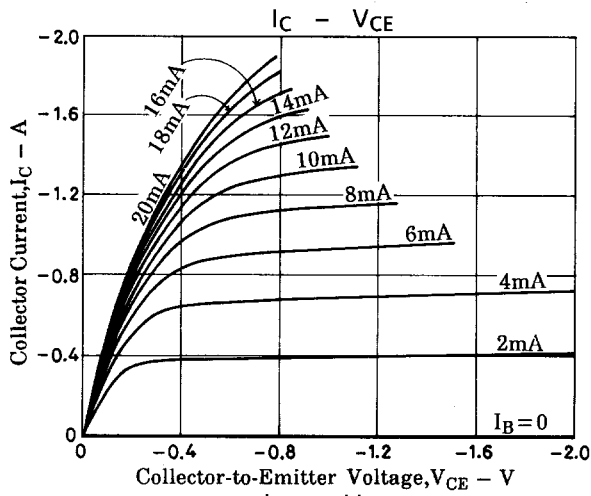
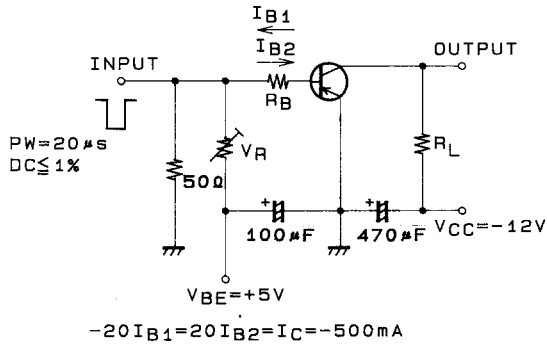
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=-20V, I_E=0$			-100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-4V, I_C=0$			-100	nA
DC Current Gain	h_{FE}	$V_{CE}=-2V, I_C=-100mA$	140		400	
Gain-Bandwidth Product	f_T	$V_{CE}=-10V, I_C=-50mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10V, f=1MHz$		32		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=-1.5A, I_B=-75mA$	-0.35		-0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=-1.5A, I_B=-75mA$	-0.85		-1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, R_{BE}=\infty$	-25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-6			V
Turn-ON Time	t_{on}	See specified Test Circuit		60		ns
Storage Time	t_{stg}	See specified Test Circuit		350		ns
Fall Time	t_f	See specified Test Circuit		25		ns

Marking:208

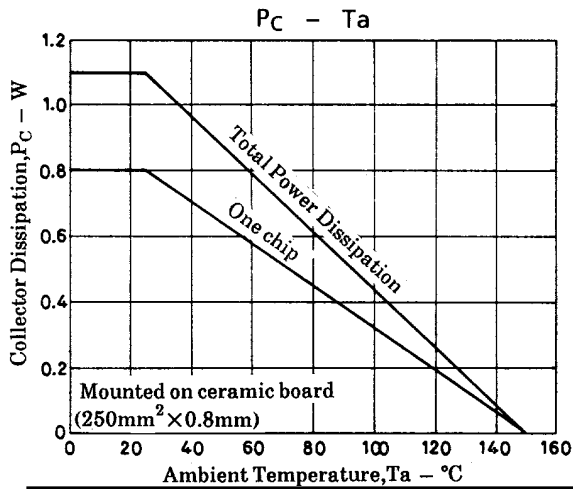
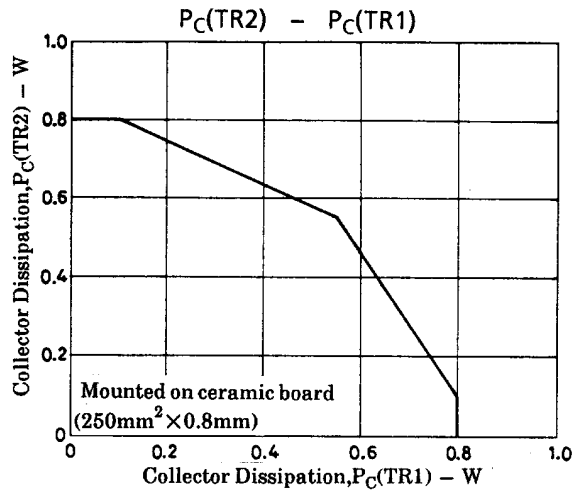
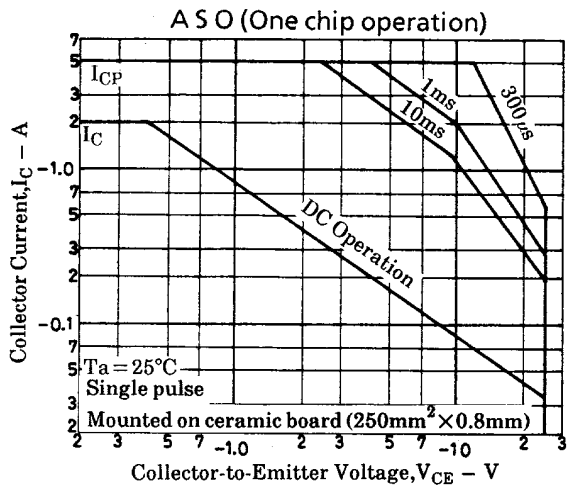
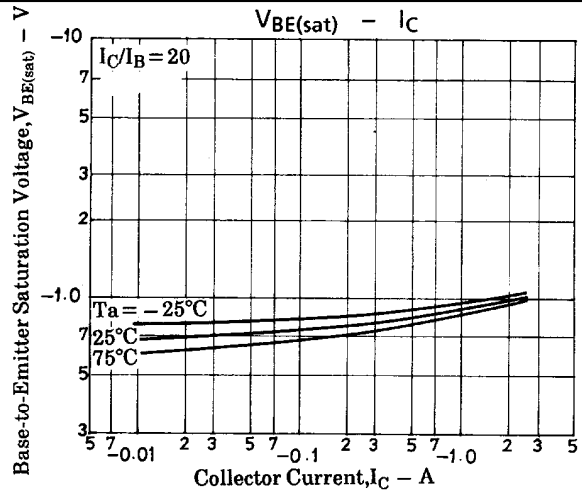
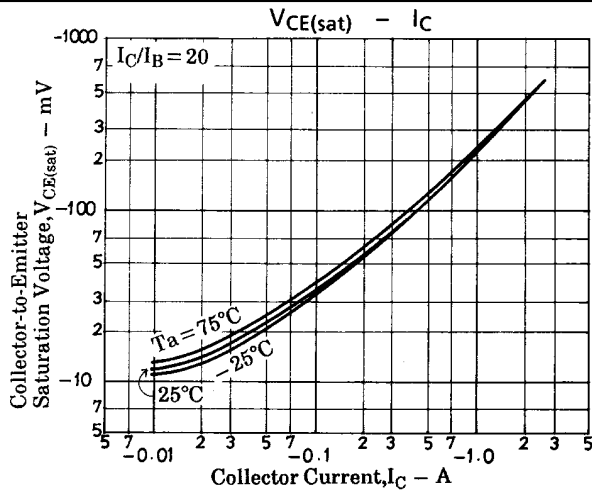
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Switching Time Test Circuit



FP208



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