



FP212

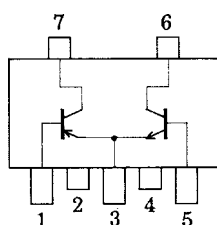
PNP/NPN Epitaxial Planar Silicon Transistors

High-Voltage Driver Applications

Features

- Composite type with a PNP transistor and an NPN transistor, in one package, facilitating high-density mounting.
- The FP212 is composed of 2 chips, one being equivalent to the 2SA1370 and the other the 2SC3467, placed in one package.

Electrical Connection



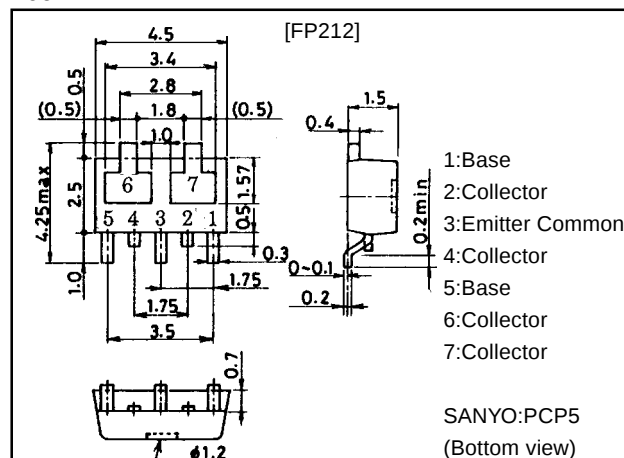
- 1:Base
- 2:Collector
- 3:Emitter Common
- 4:Collector
- 5:Base
- 6:Collector
- 7:Collector

(Top view)

Package Dimensions

unit:mm

2097A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-)200	V
Collector-to-Emitter Voltage	V_{CEO}		(-)200	V
Emitter-to-Base Voltage	V_{EBO}		(-)5	V
Collector Current	I_C		(-)100	mA
Collector Current (Pulse)	I_{CP}		(-)200	mA
Base Current	I_B		(-)10	mA
Collector Dissipation	P_C	Mounted on ceramic board (250mm ² ×0.8mm) 1 unit	0.75	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm ² ×0.8mm)	1.0	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

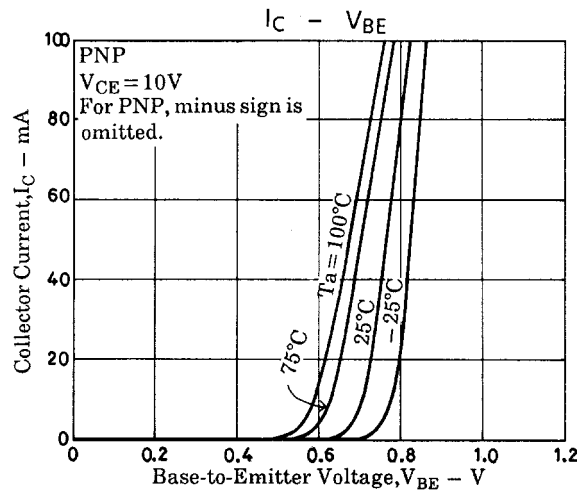
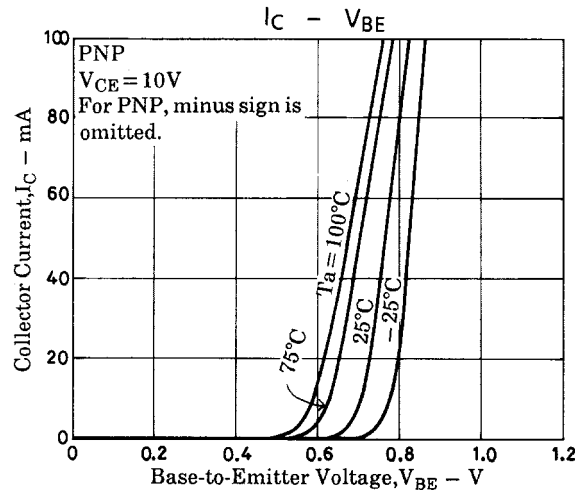
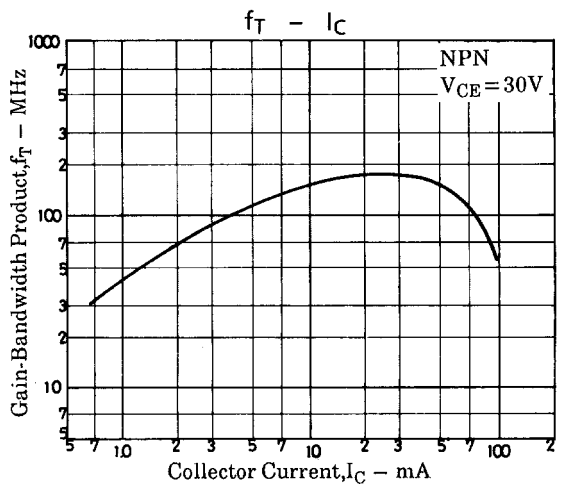
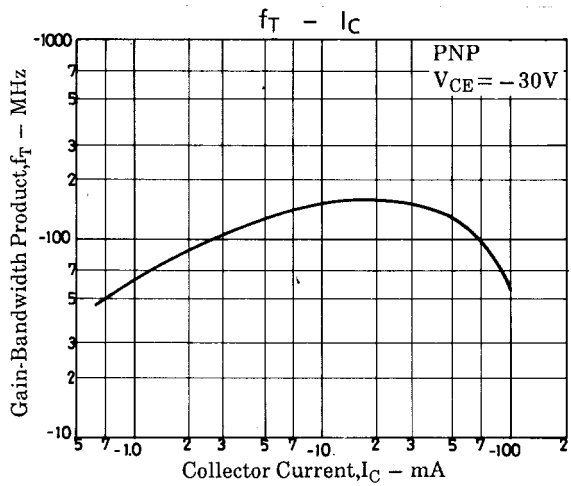
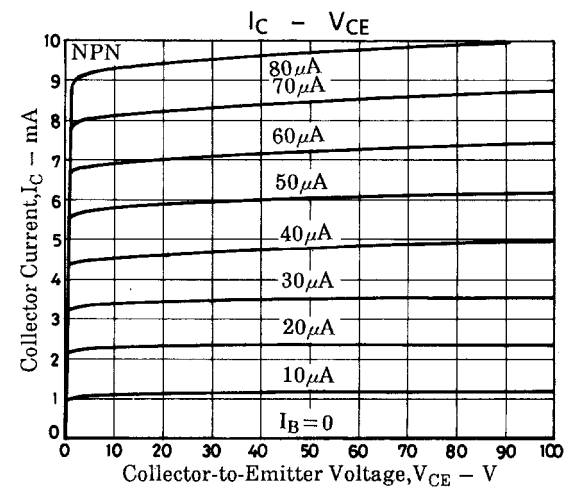
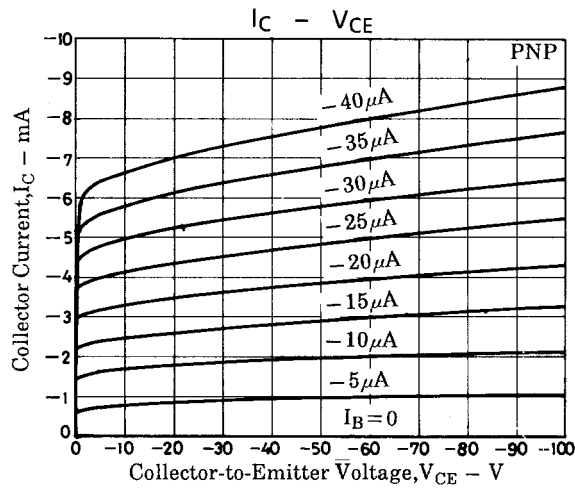
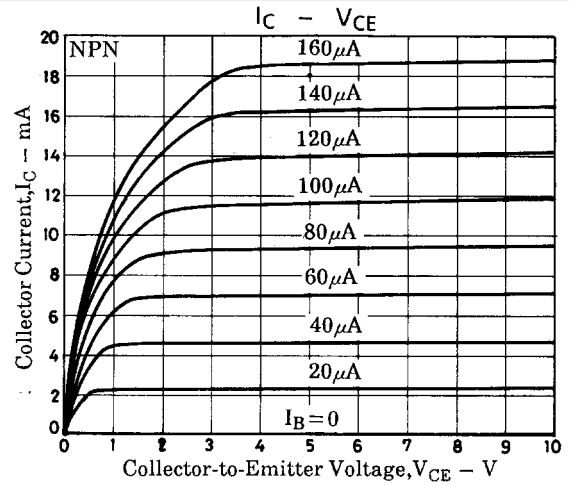
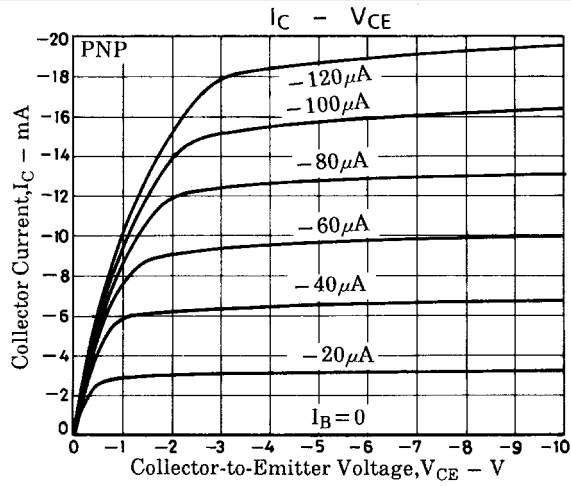
Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)150V, I_E=0$			$(-)100$	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$			$(-)100$	nA
DC Current Gain	h_{FE}	$V_{CE}=(-)10V, I_C=(-)10mA$	60		200	
Gain-Bandwidth Product	f_T	$V_{CE}=(-)30V, I_C=(-)10mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)30V, f=1MHz$		(2.6) 1.7		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=(-)30V, f=1MHz$		(1.7) 1.2		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)20mA, I_B=(-)2mA$			$(-)0.6$	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)20mA, I_B=(-)2mA$			$(-)1.0$	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	$(-)200$			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	$(-)200$			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	$(-)5$			V

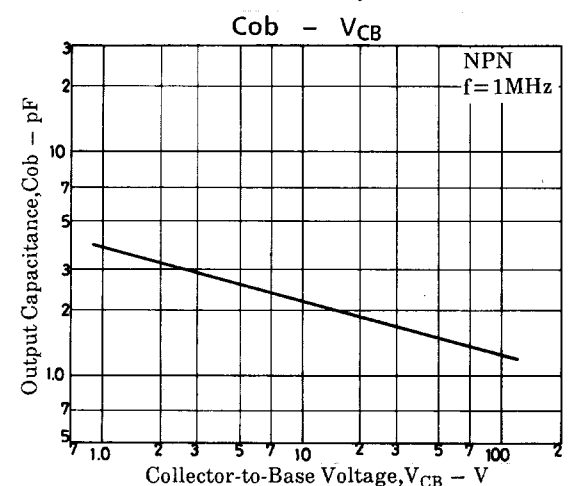
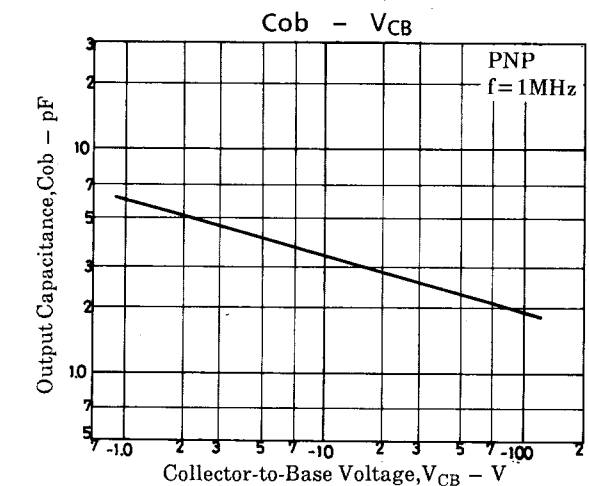
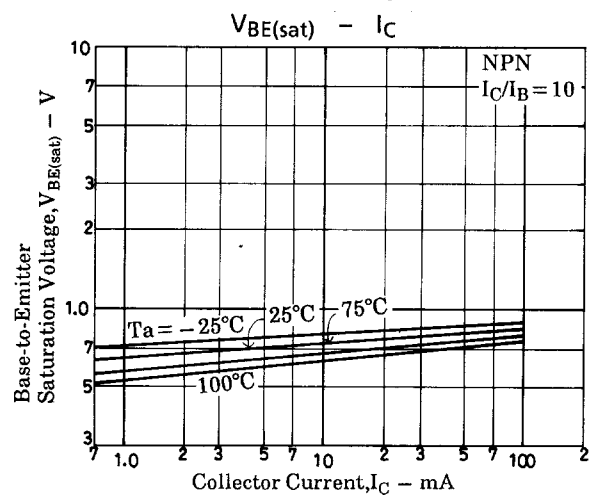
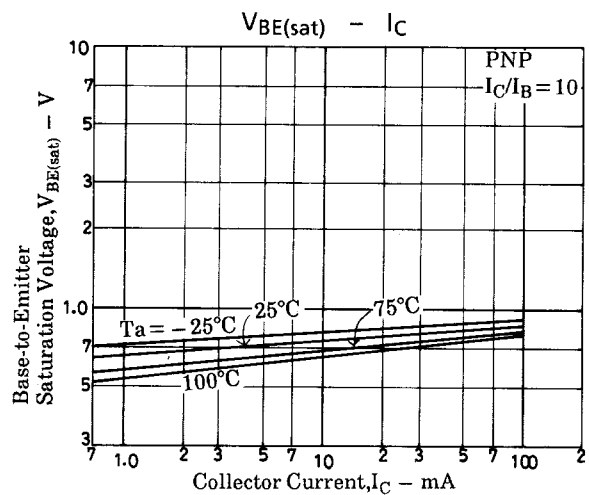
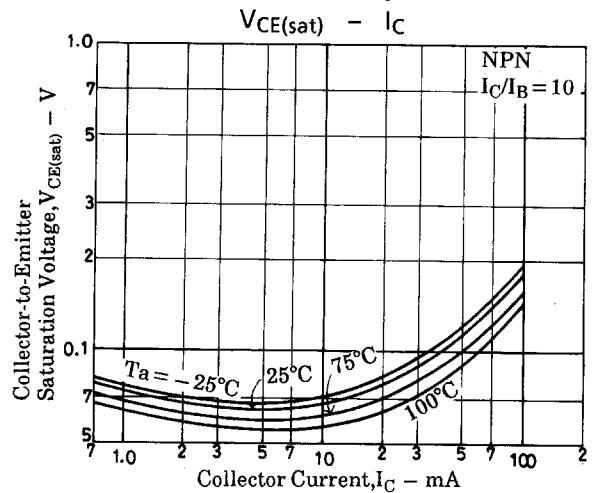
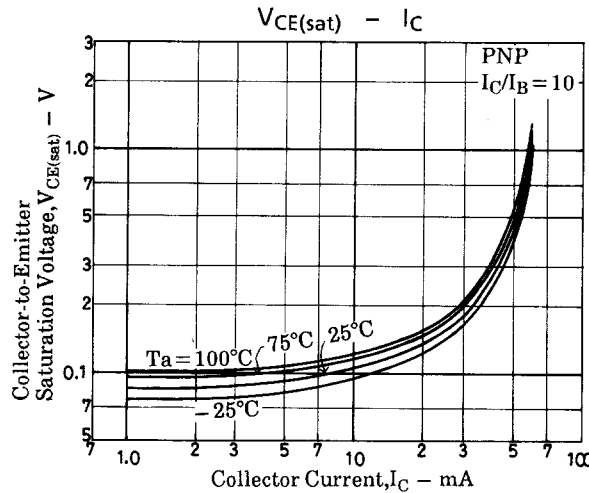
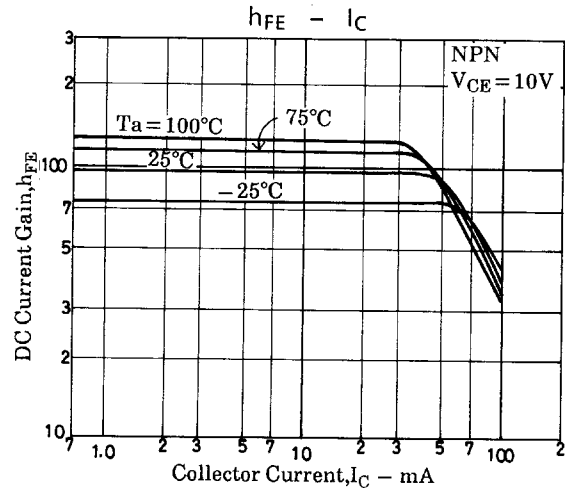
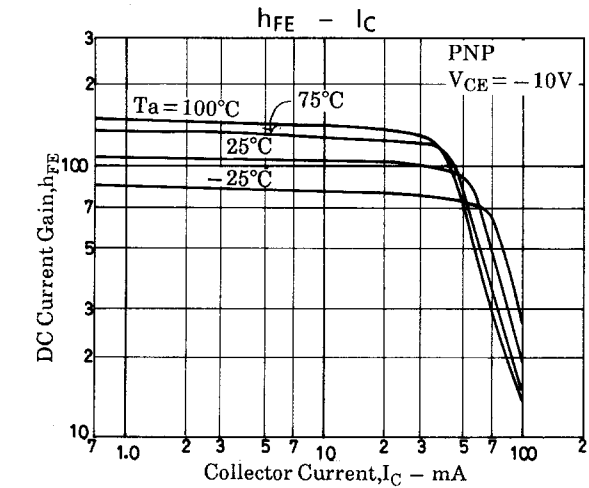
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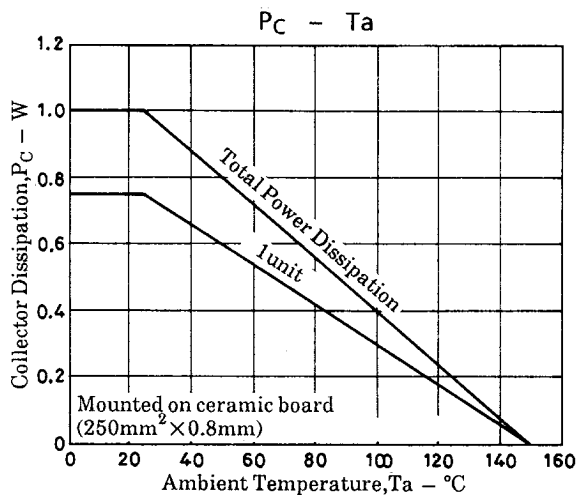
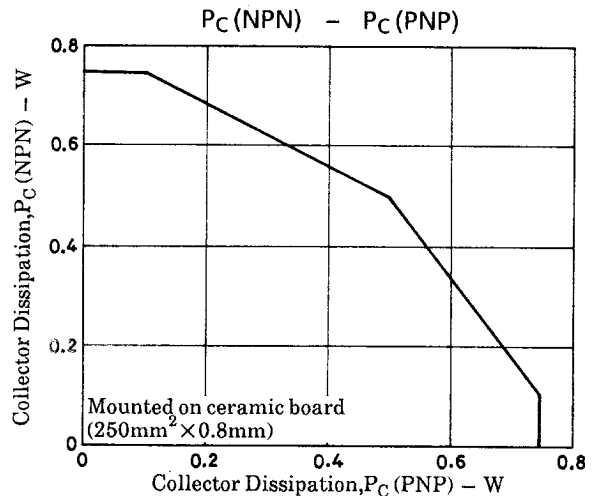
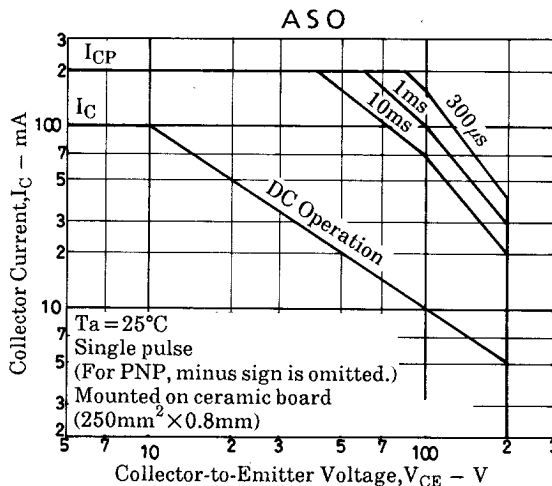
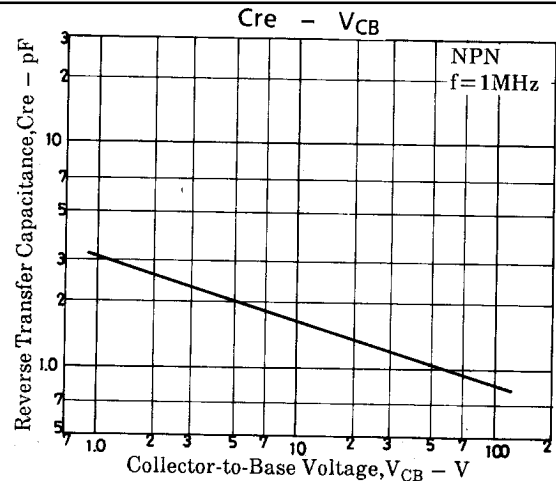
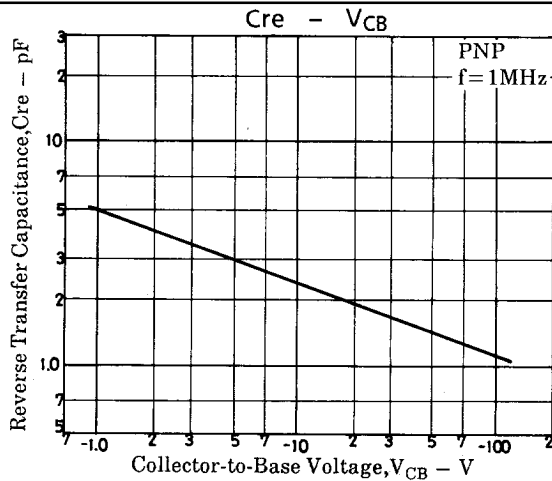
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