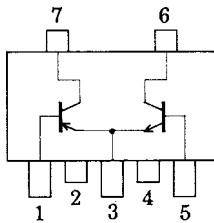


SANYO**FP212**

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

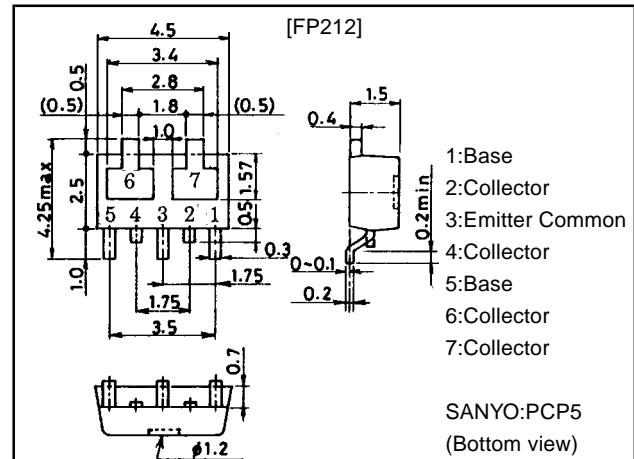
- 1:Base
2:Collector
3:Emitter Common
4:Collector
5:Base
6:Collector
7:Collector

(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_{CB0}		(-)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 \times 0.8mm) 1 unit	0.75	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm \times 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

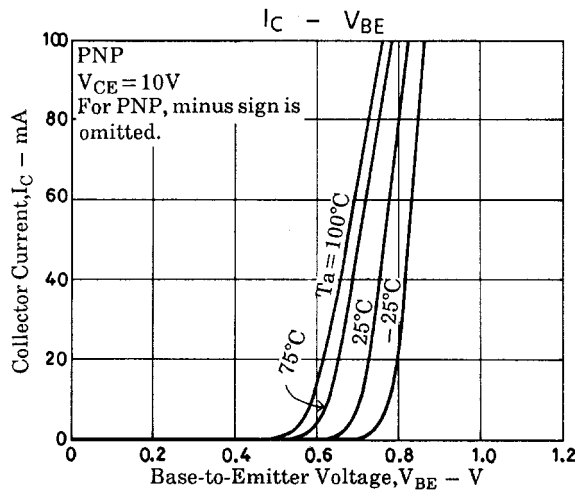
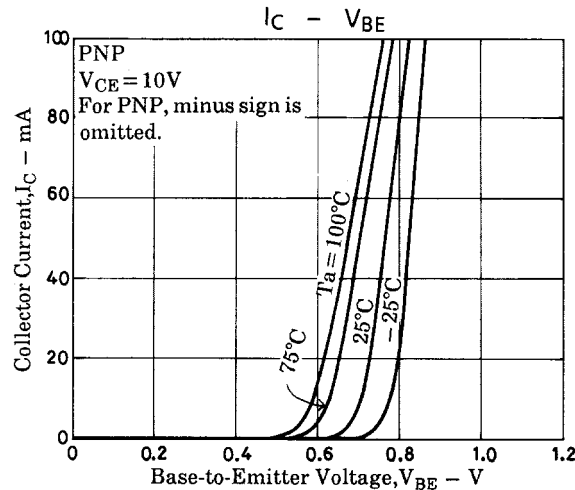
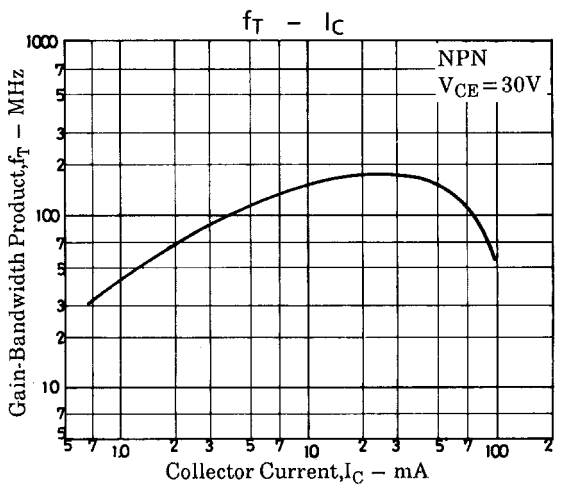
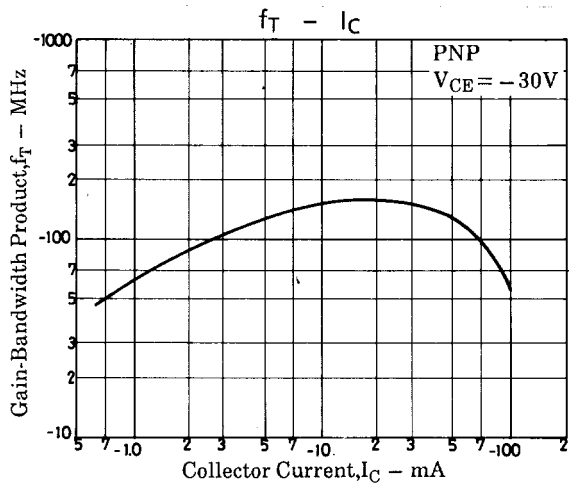
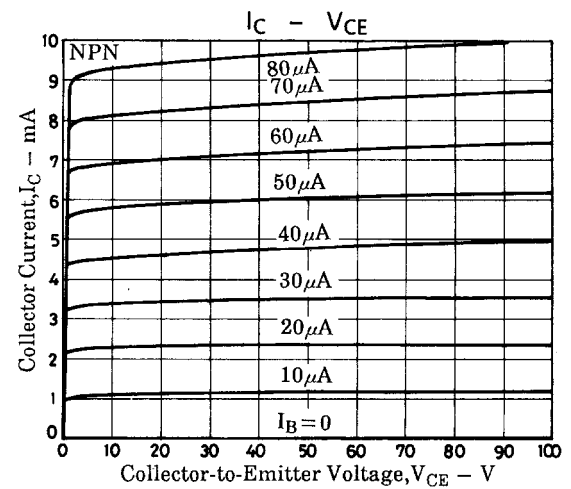
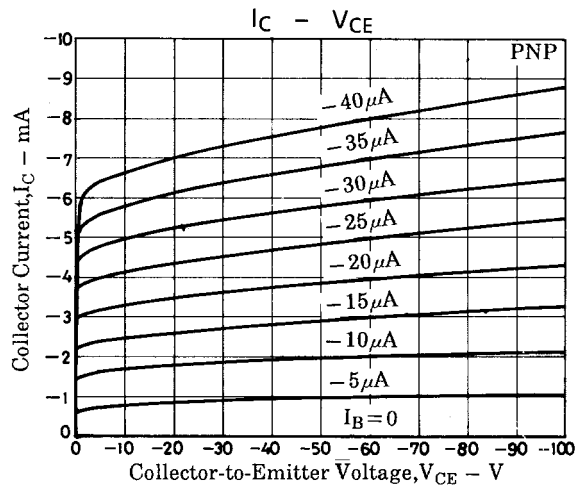
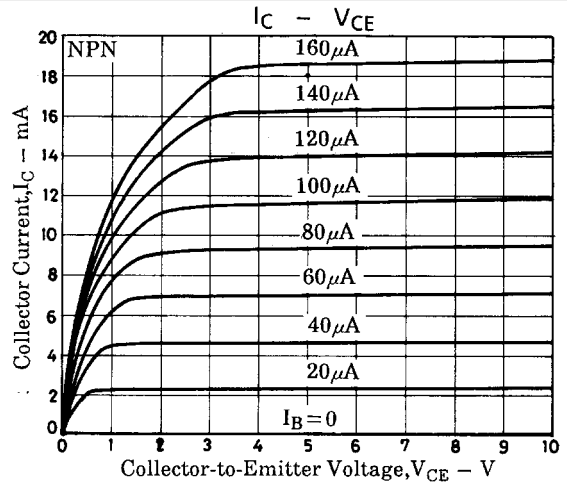
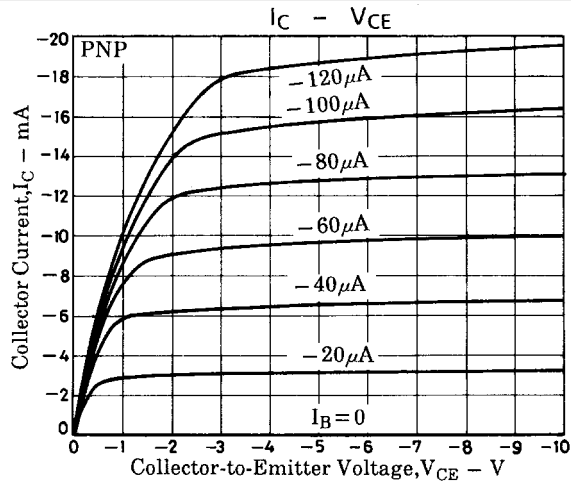
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)150V, I_E = 0$			(-)100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4V, I_C = 0$			(-)100	nA
DC Current Gain	h_{FE}	$V_{CE} = (-)10V, I_C = (-)10mA$	60		200	
Gain-Bandwidth Product	f_T	$V_{CE} = (-)30V, I_C = (-)10mA$		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

Marking:212

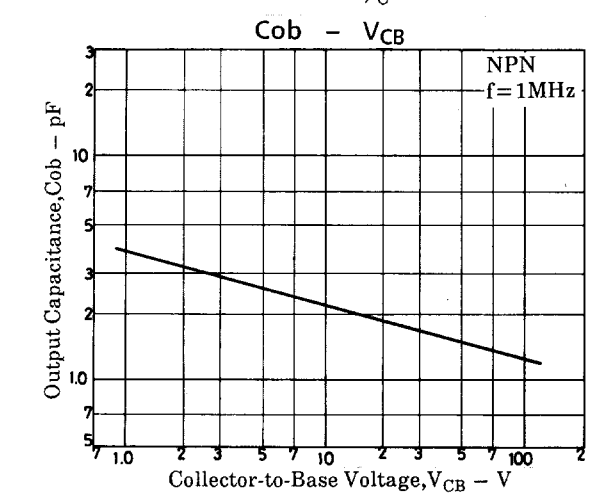
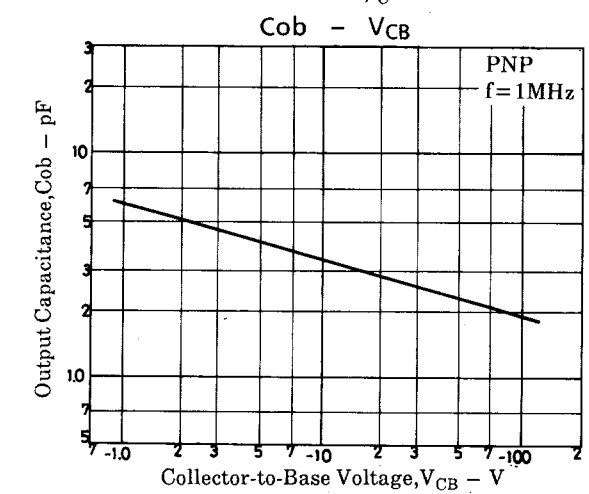
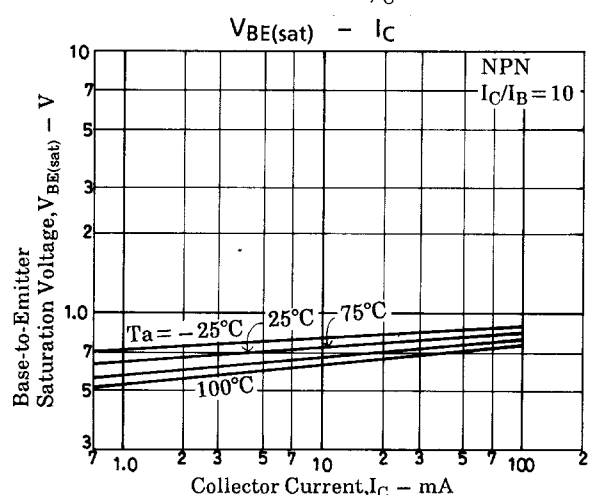
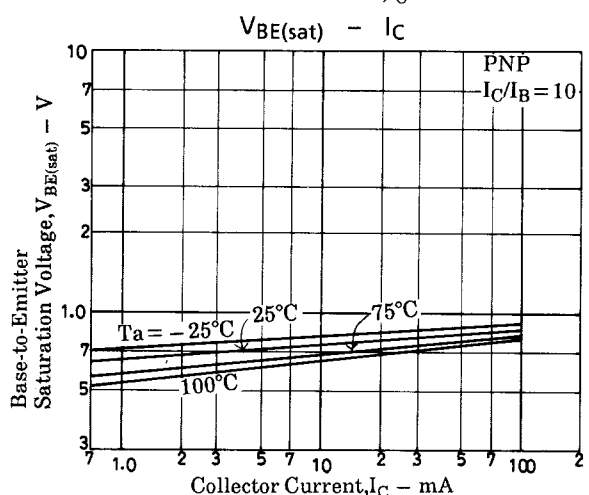
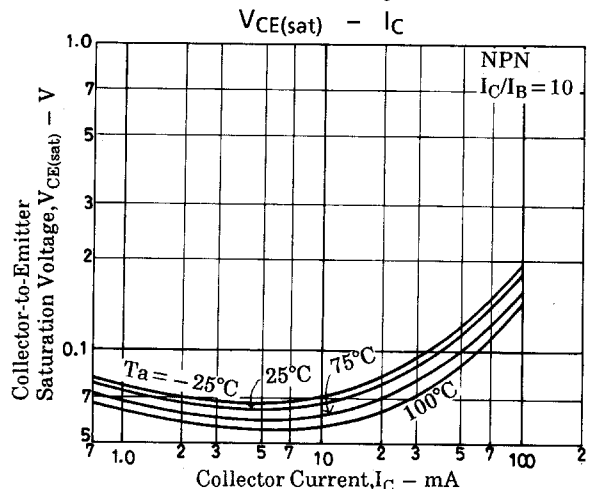
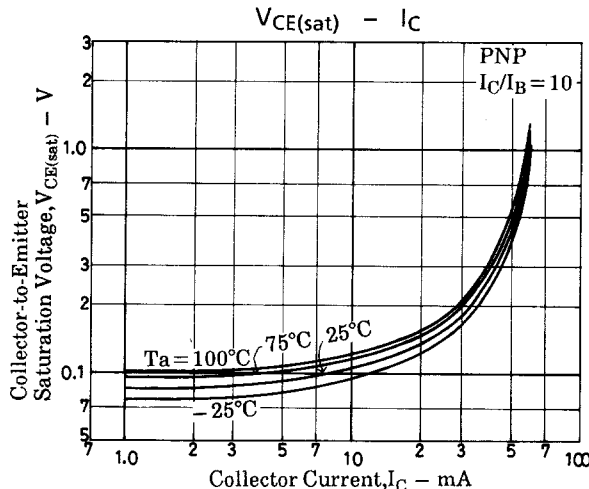
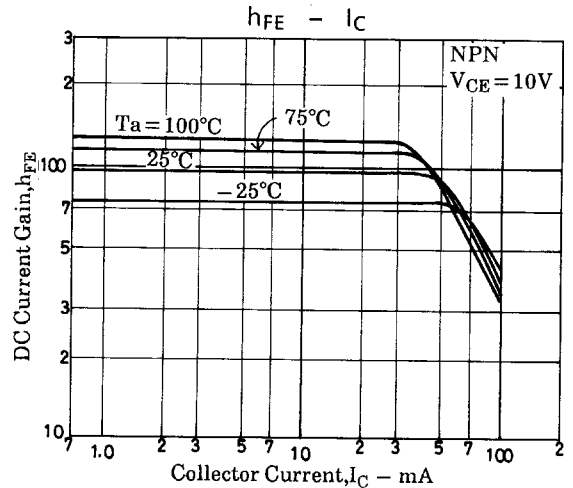
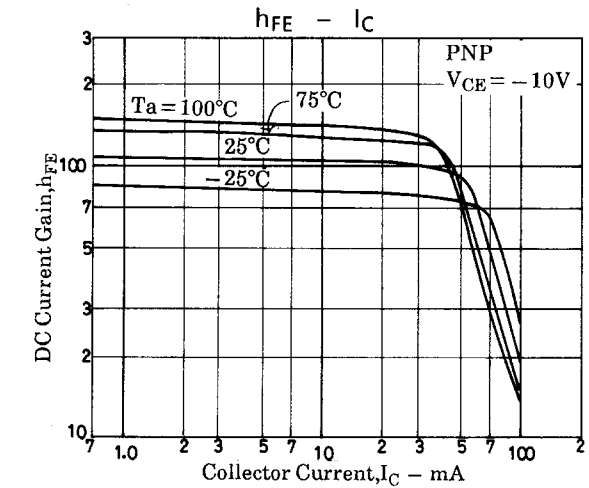
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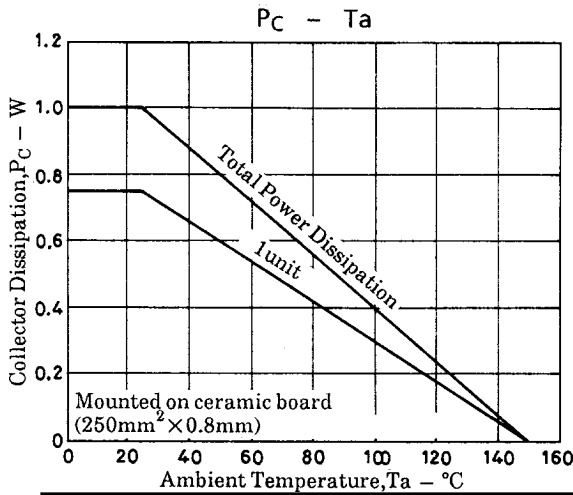
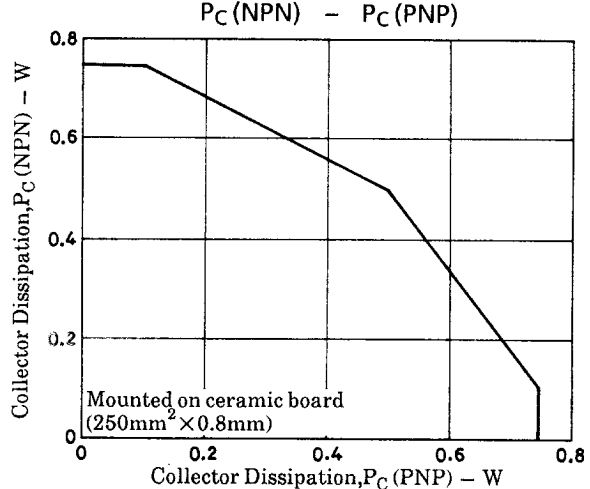
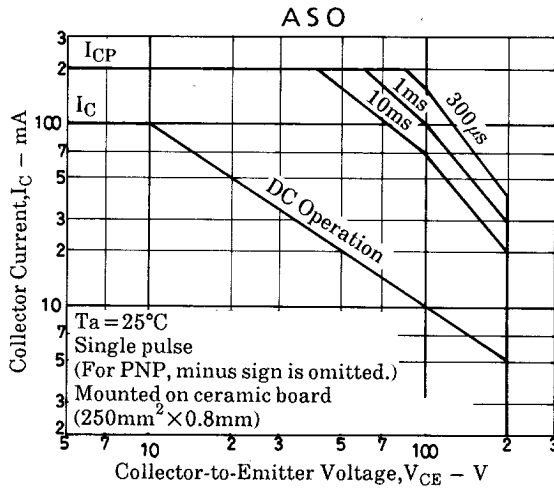
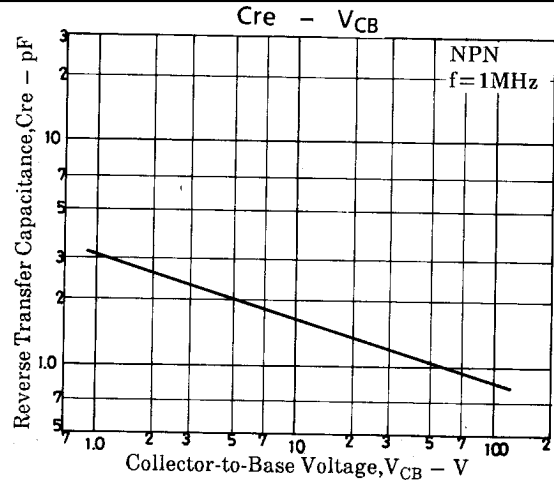
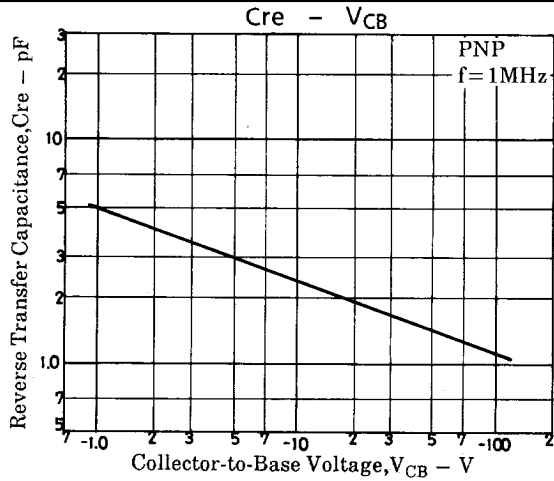
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FP212



FP212





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