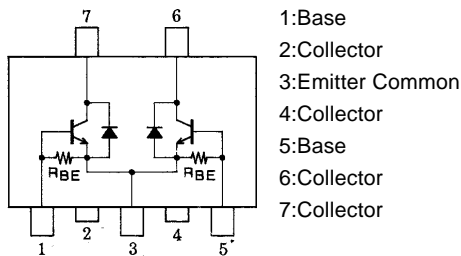


**SANYO****FP214**

NPN Epitaxial Planar Silicon Transistor

**Motor Driver Applications****Features**

- Composite type with 2 NPN transistors, facilitating high-density mounting.
- The FP214 is composed of 2 chips, each being equivalent to the 2SD2100, placed in one package.

**Electrical Connection**

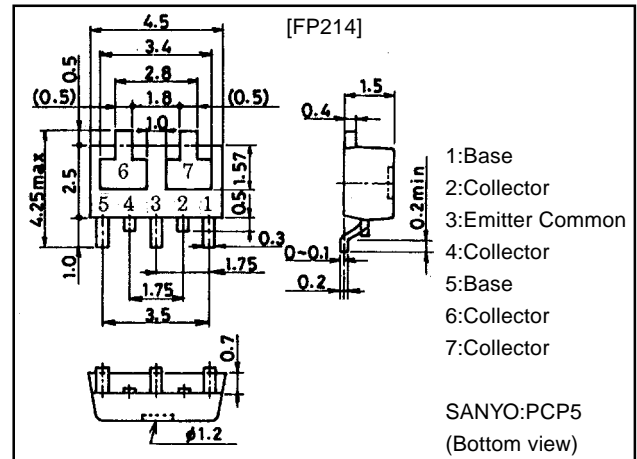
- 1:Base  
2:Collector  
3:Emitter Common  
4:Collector  
5:Base  
6:Collector  
7:Collector

(Top view)

**Package Dimensions**

unit:mm

2097A

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		25	V
Collector-to-Emitter Voltage	$V_{CEO}$		20	V
Emitter-to-Base Voltage	$V_{EBO}$		6	V
Collector Current	$I_C$		2	A
Collector Current (Pulse)	$I_{CP}$		4	A
Base Current	$I_B$		400	mA
Collector Dissipation	$P_C$	Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm) 1 unit	0.8	W
Total Power Dissipation	$P_T$	Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm)	1.1	W
Junction Temperature	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

**Electrical Characteristics at Ta=25°C**

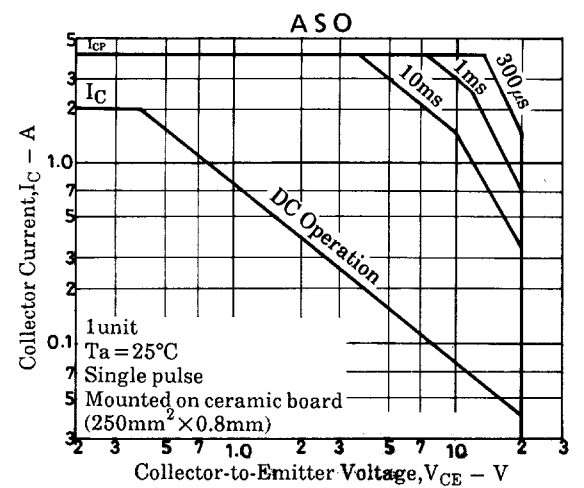
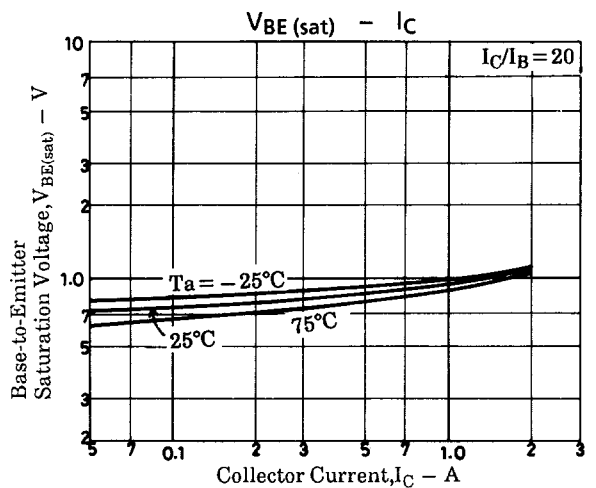
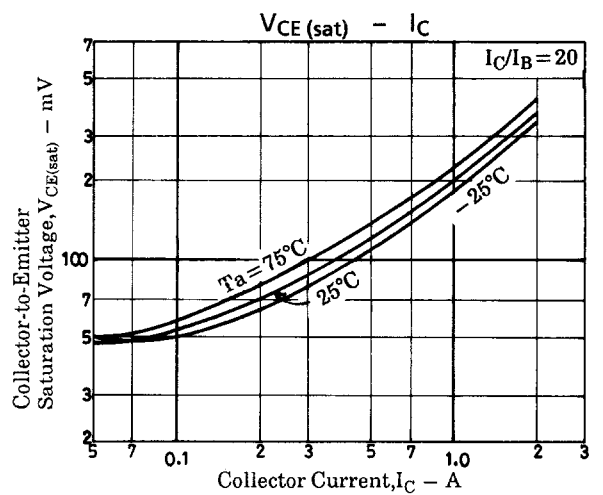
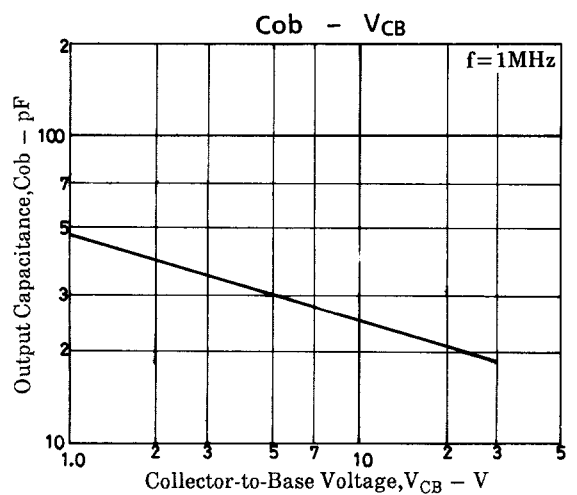
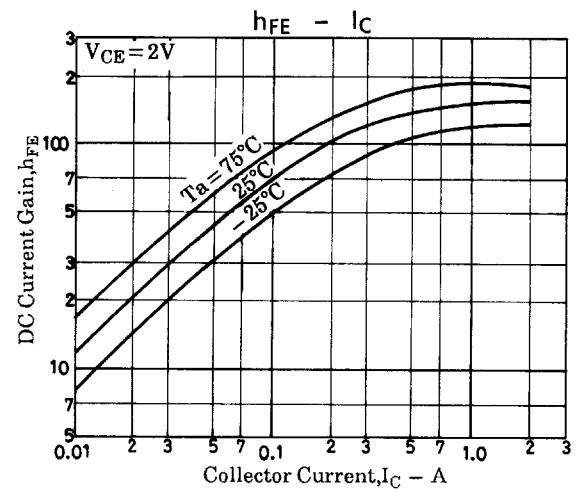
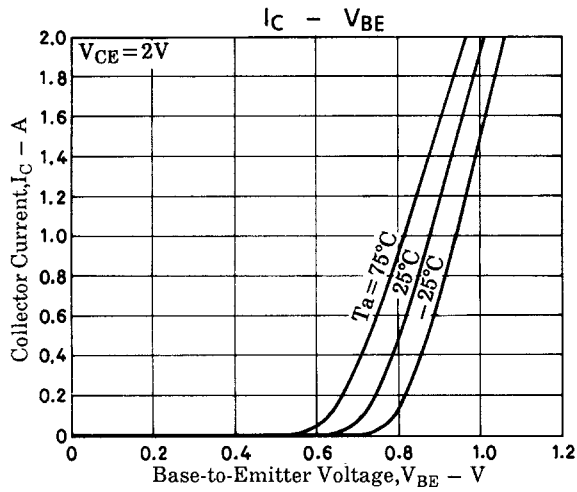
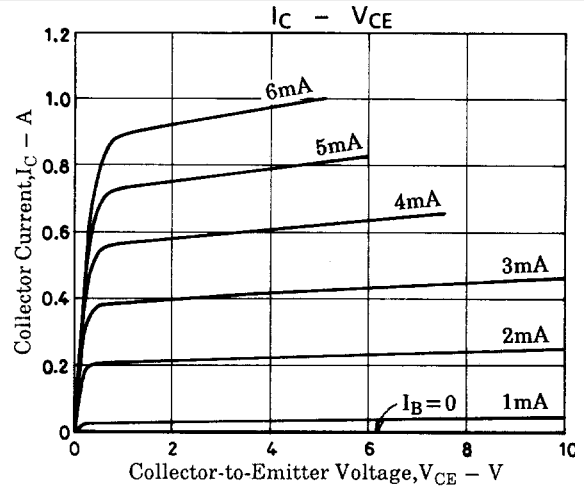
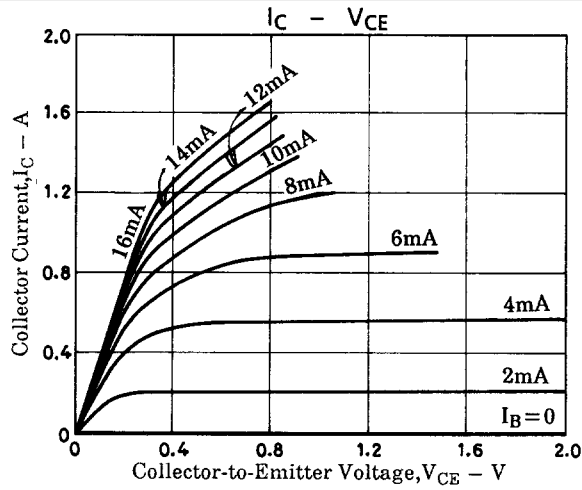
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=20V, I_E=0$			1	μA
DC Current Gain	$h_{FE1}$	$V_{CE}=2V, I_C=0.5A$	70			
	$h_{FE2}$	$V_{CE}=2V, I_C=2A$	50			
Gain-Bandwidth Product	$f_T$	$V_{CE}=2V, I_C=0.5A$		200		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$		25		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=50mA$		0.25	0.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=1A, I_B=50mA$			1.5	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10μA, I_E=0$	25			V
C-E Breakdown Voltage	$V_{(BR)CEO1}$	$I_C=10μA, R_{BE}=\infty$	25			V
	$V_{(BR)CEO2}$	$I_E=10mA, R_{BE}=\infty$	20			V
Diode Forward Voltage	$V_F$	$I_F=0.5A$			1.5	V
Base-to-Emitter Resistance	$R_{BE}$			1.6		kΩ

Marking:214

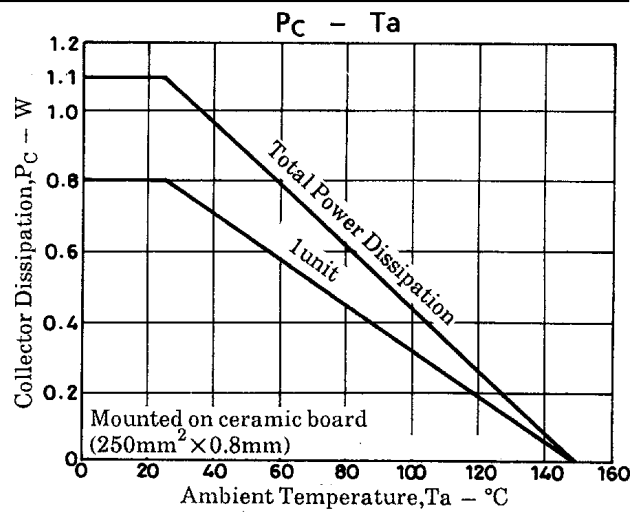
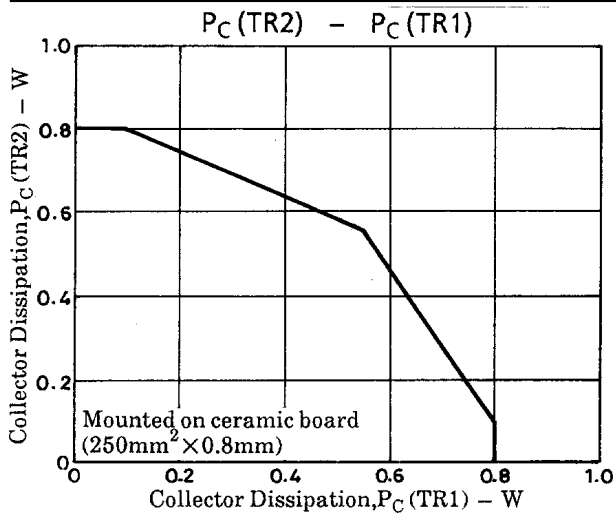
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# FP214



## FP214



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