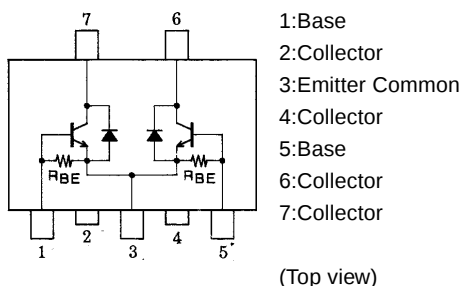


SANYO**FP214**

NPN Epitaxial Planar Silicon Transistor

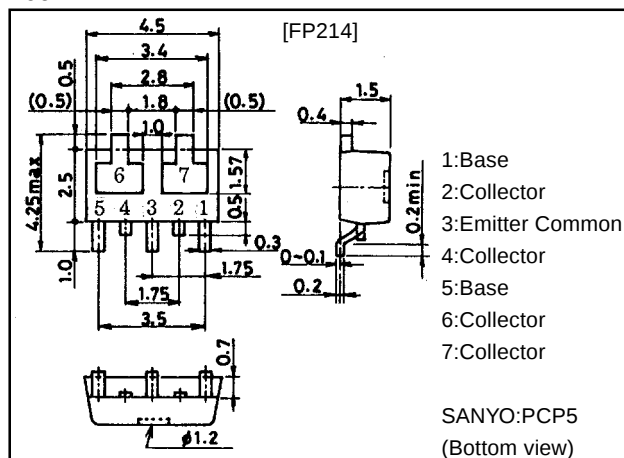
Motor Driver Applications**Features**

- 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**Package Dimensions**

unit:mm

2097A

**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		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 ² ×0.8mm) 1 unit	0.8	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm ² ×0.8mm)	1.1	W
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

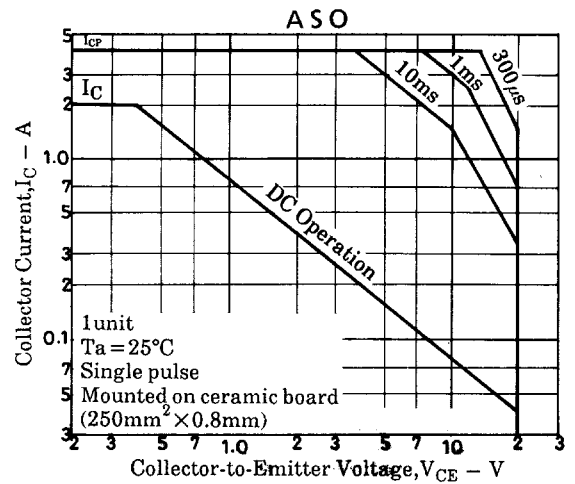
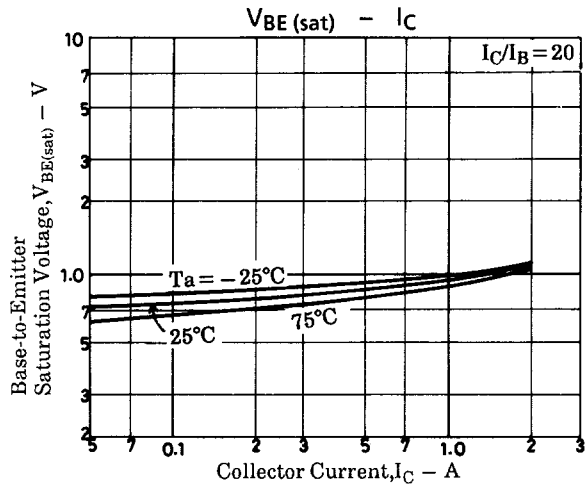
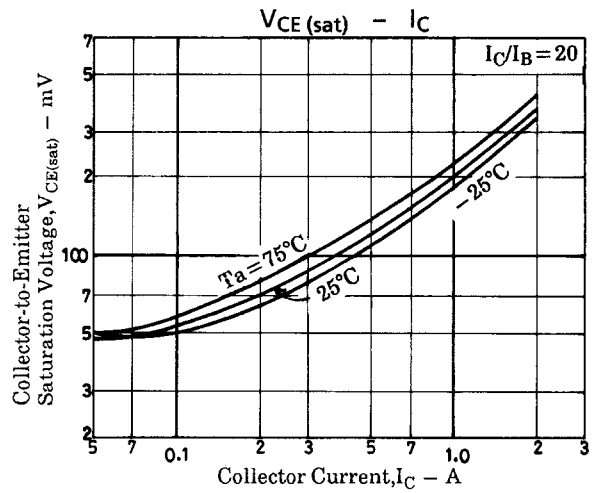
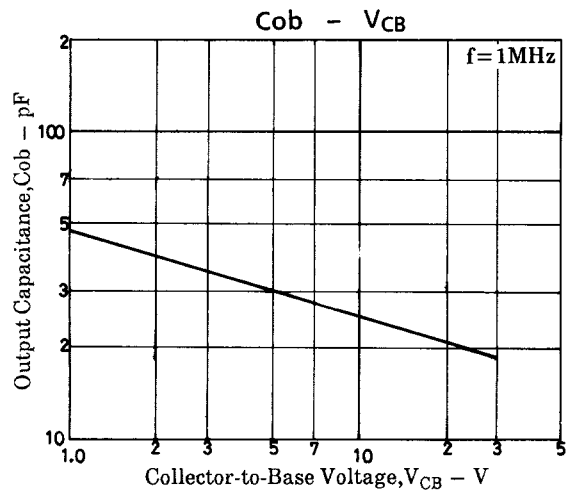
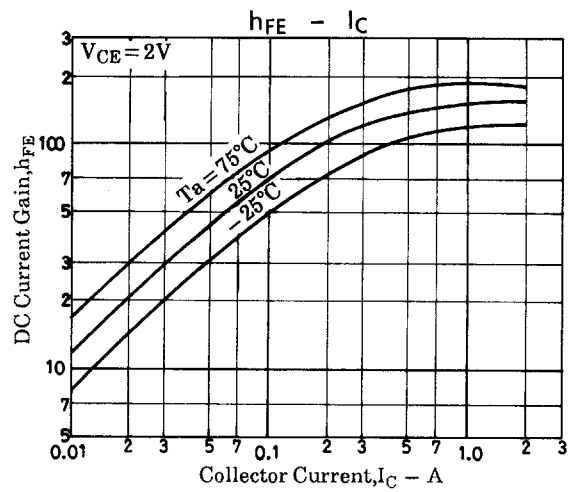
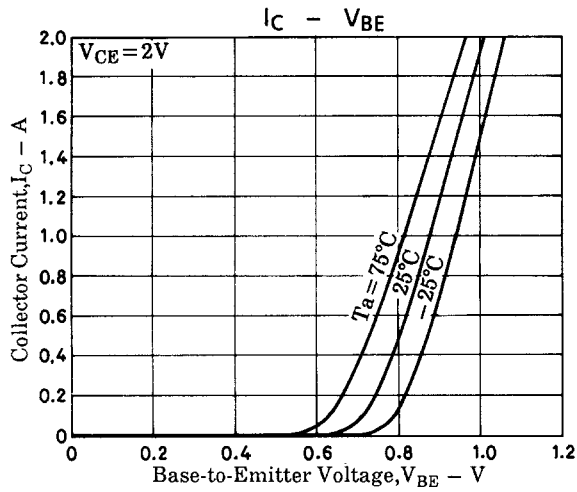
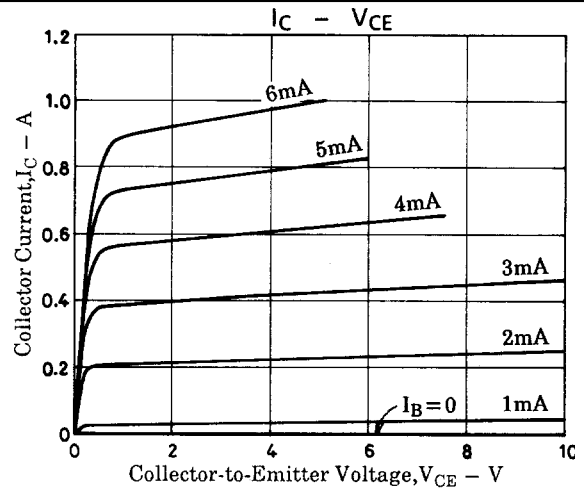
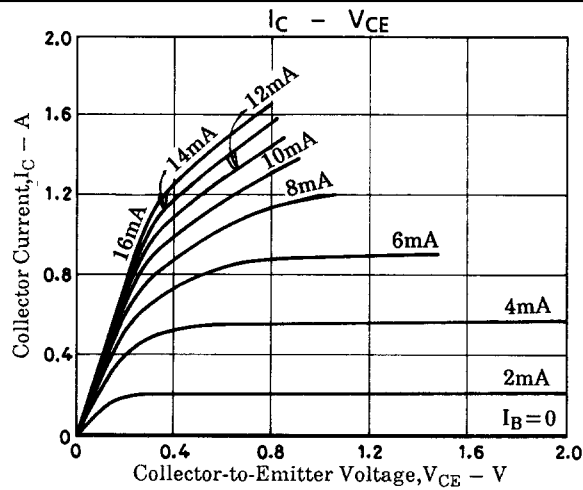
Electrical Characteristics at $T_a=25^\circ\text{C}$

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

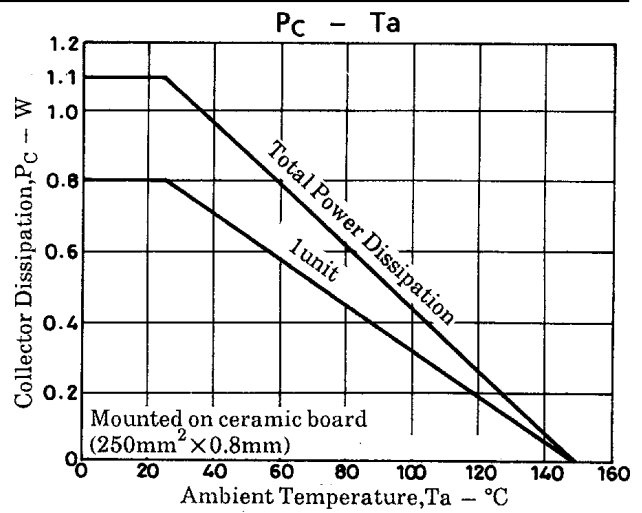
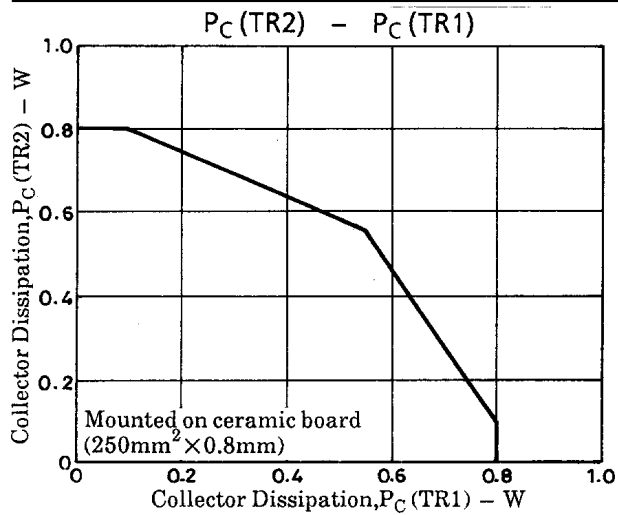
Marking:214

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FP214



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