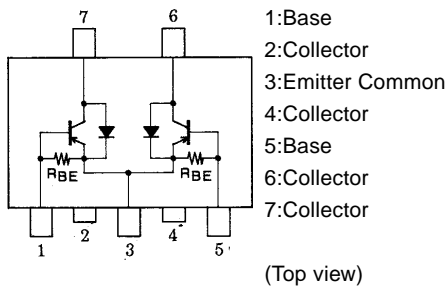


SANYO**FP213**

PNP Epitaxial Planar Silicon Transistor

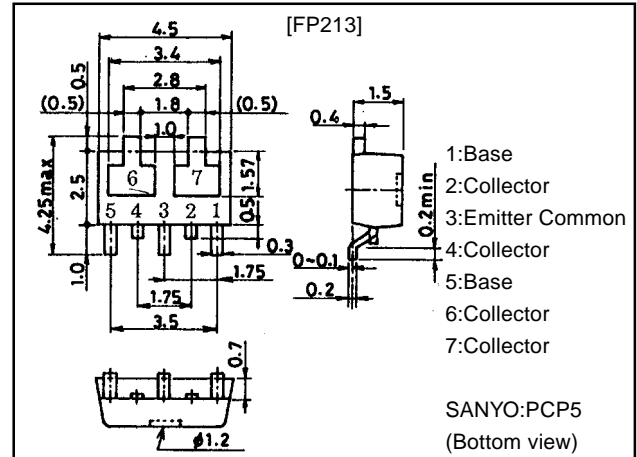
Motor Driver Applications**Features**

- Composite type with 2 PNP transistors facilitating high-density mounting.
- The FP213 is composed of 2 chips, each being equivalent to the 2SB1397, 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_{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 \times 0.8mm) 1 unit	0.8	W
Total Power Dissipation	P_T	Mounted on ceramic board (250mm \times 0.8mm)	1.1	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

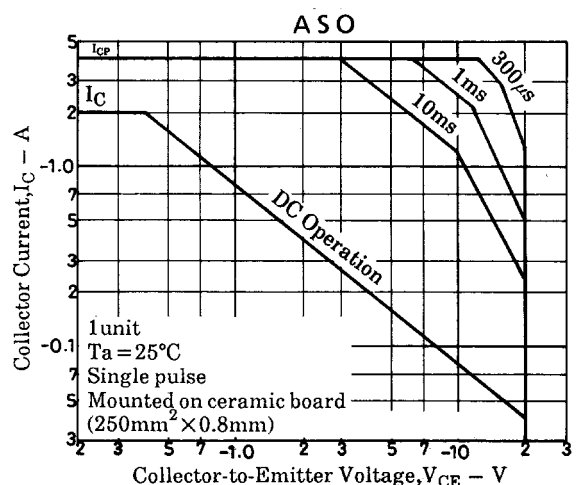
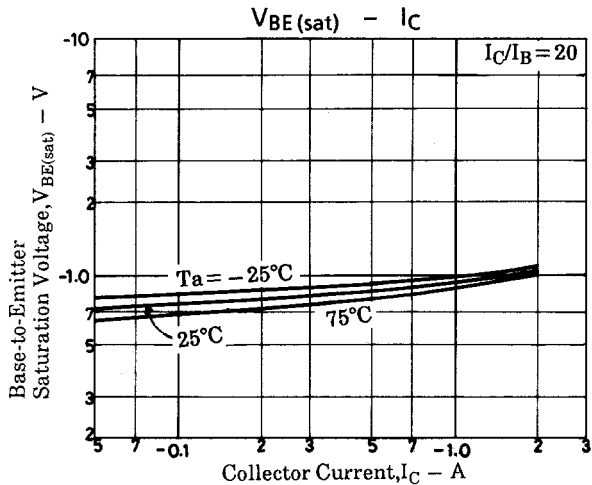
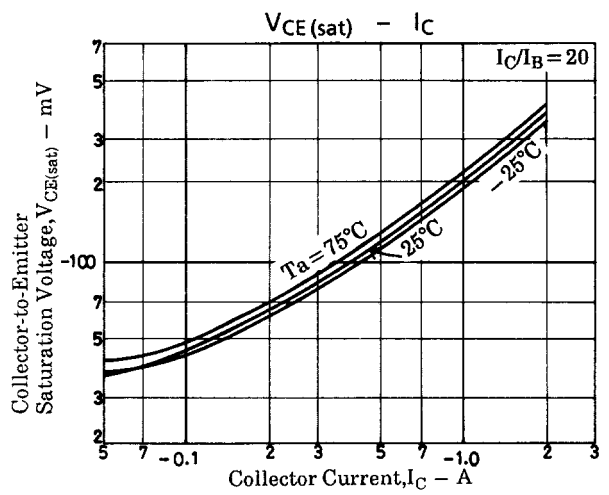
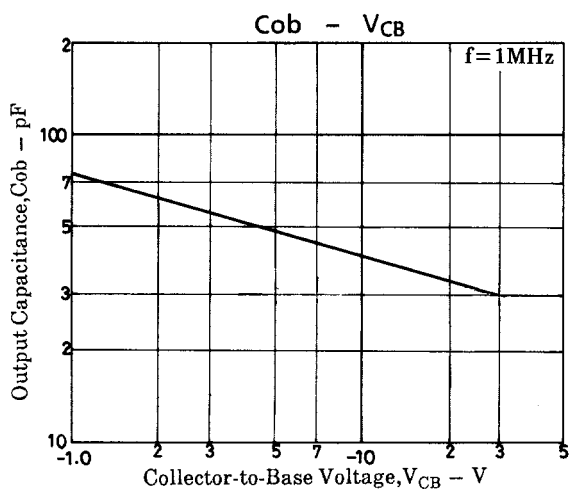
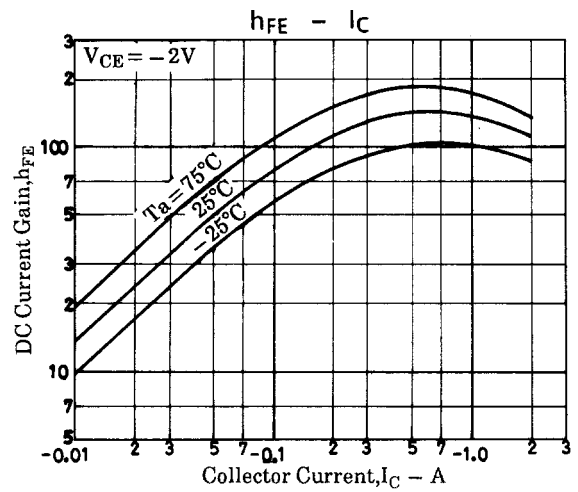
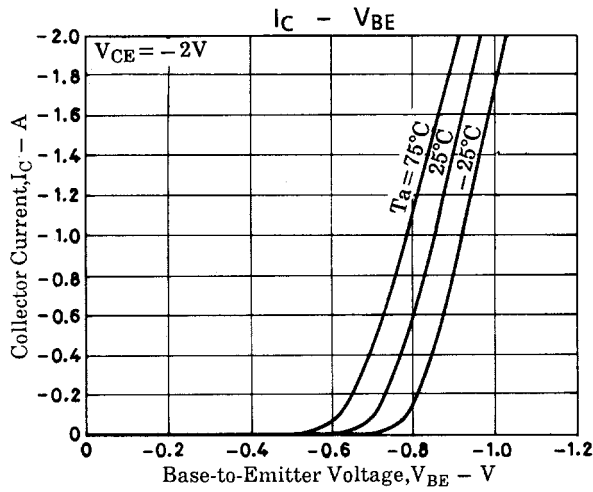
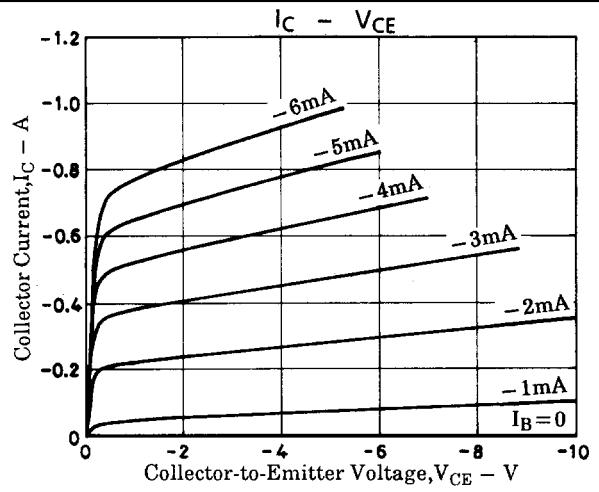
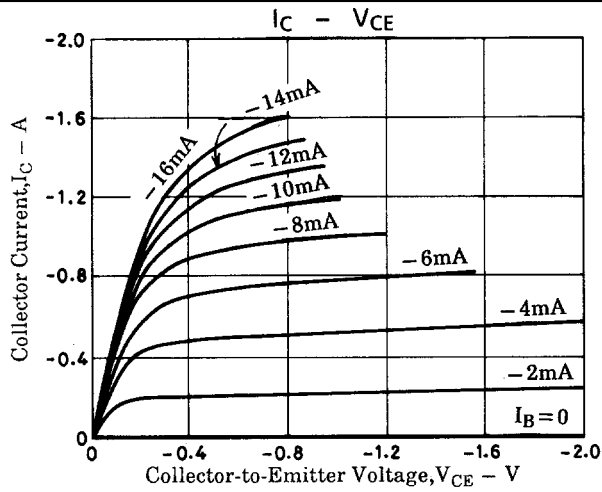
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CB0}	$V_{CB}=-20\text{V}, I_E=0$			-1	μA
DC Current Gain	h_{FE1}	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$	70			
	h_{FE2}	$V_{CE}=-2\text{V}, I_C=-2\text{A}$	50			
Gain-Bandwidth Product	f_T	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$		300		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, f=1\text{MHz}$		40		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	$V_{(BR)CEO1}$	$I_C=-10\text{mA}, R_{BE}=\infty$	-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:213

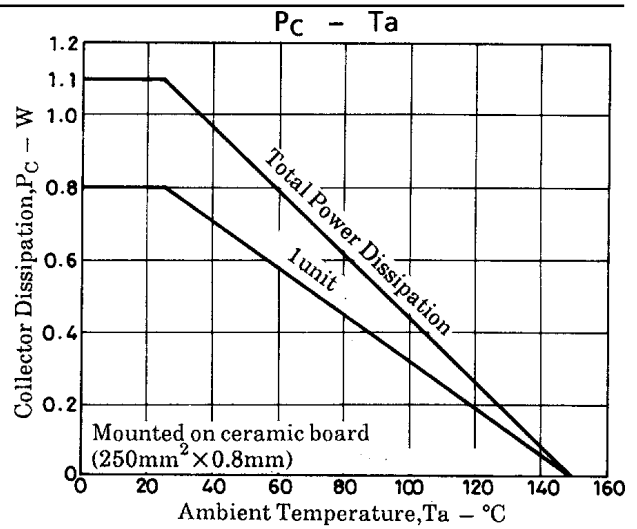
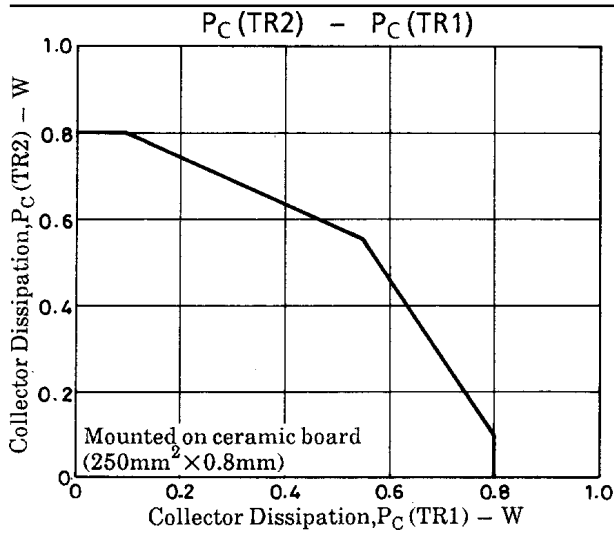
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FP213



FP213



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