

Ordering number:EN5063



FC155

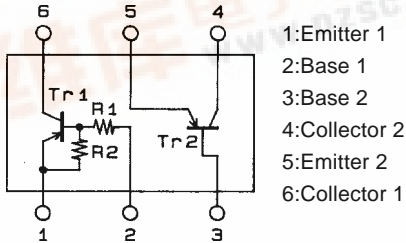
PNP Epitaxial Planar Silicon Transistor (With bias resistances)
PNP Epitaxial Planar Silicon Transistor

Constant-Current Circuit Applications

Features

- Complex type of 2 devices (transistor with resistances and low saturation transistor) contained in one package, facilitating high-density mounting.

Electrical Connection

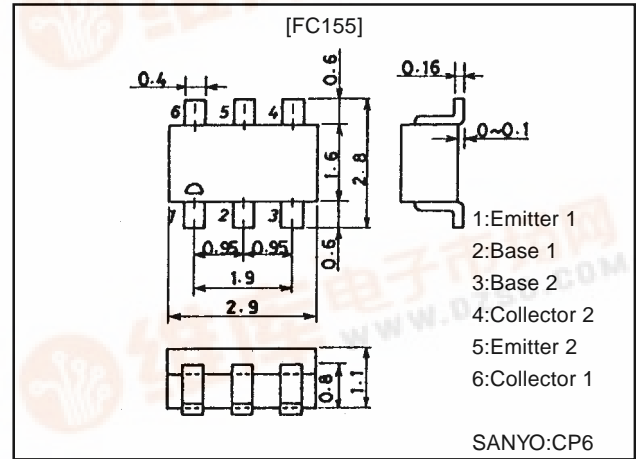


- 1:Emitter 1
- 2:Base 1
- 3:Base 2
- 4:Collector 2
- 5:Emitter 2
- 6:Collector 1

Package Dimensions

unit:mm

2104A



SANYO:CP6

Specifications

Absolute Maximum Ratings at Ta = 25°C

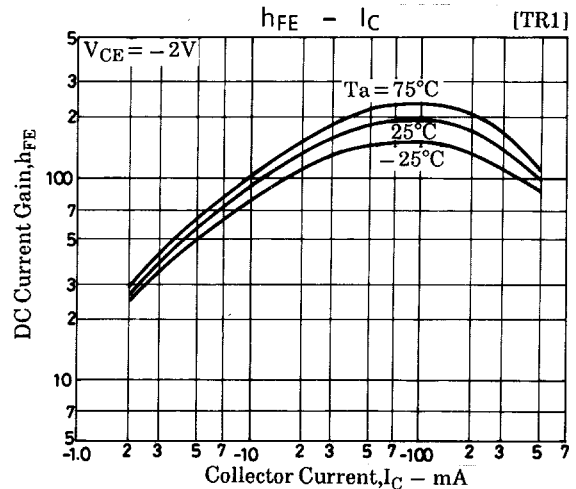
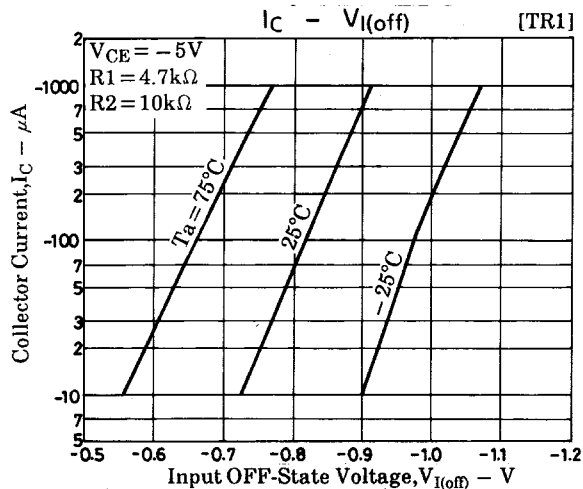
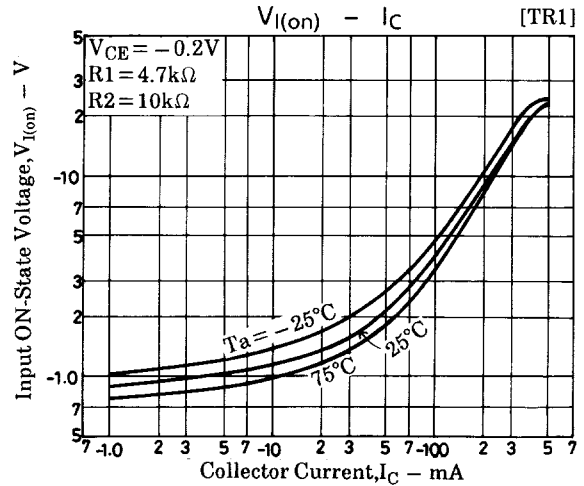
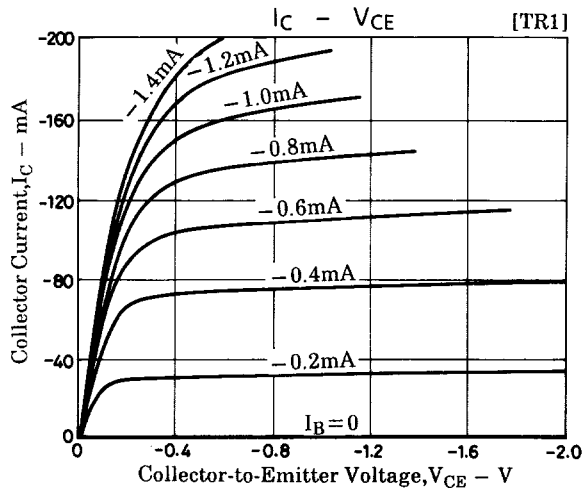
Parameter	Symbol	Conditions	Ratings	Unit
[TR1]				
Collector-to-Base Voltage	V _{CB0}		-20	V
Collector-to-Emitter Voltage	V _{CEO}		-15	V
Emitter-to-Base Voltage	V _{EBO}		-5	V
Collector Current	I _C		-500	mA
Collector Current (Pulse)	I _{CP}		-1	A
Base Current	I _B		-5	mA
Collector Dissipation	P _C	1 unit	200	mW
Total Dissipation	P _T		300	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C
[TR2]				
Collector-to-Base Voltage	V _{CB0}		-20	V
Collector-to-Emitter Voltage	V _{CEO}		-15	V
Emitter-to-Base Voltage	V _{EBO}		-5	V
Collector Current	I _C		-500	mA
Collector Current (Pulse)	I _{CP}		-1	A
Base Current	I _B		-100	mA
Collector Dissipation	P _C	1 unit	200	mW
Total Dissipation	P _T		300	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C



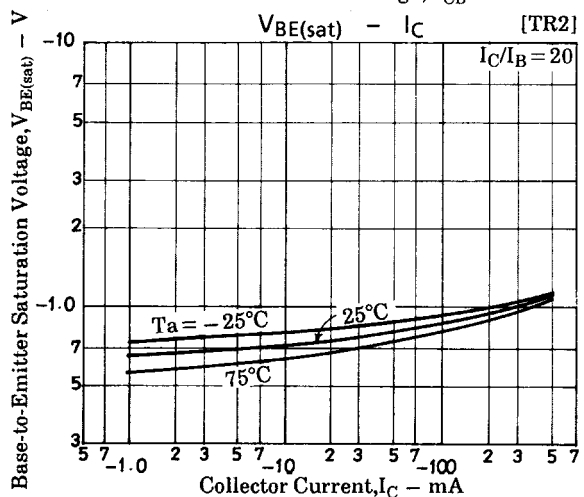
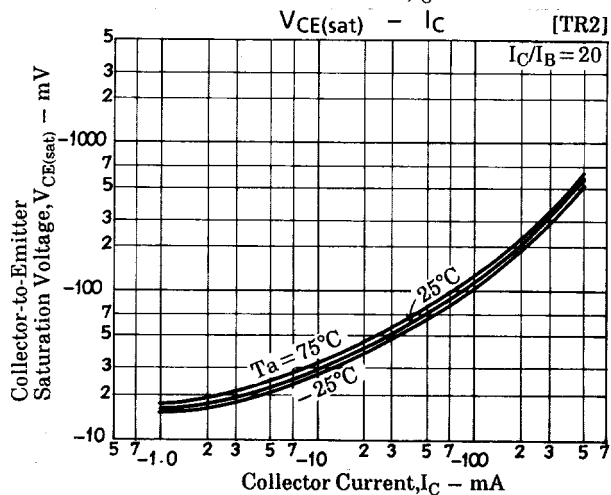
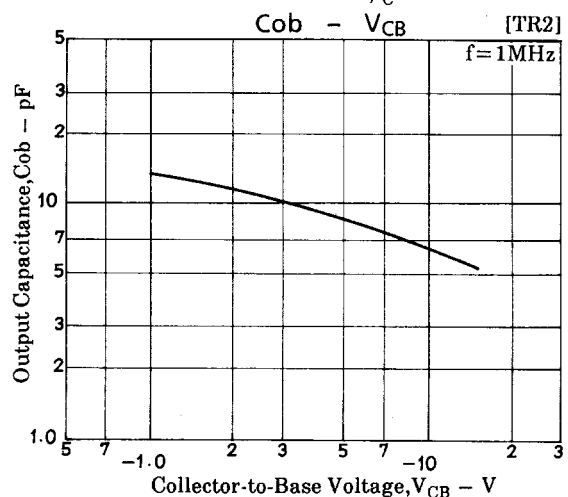
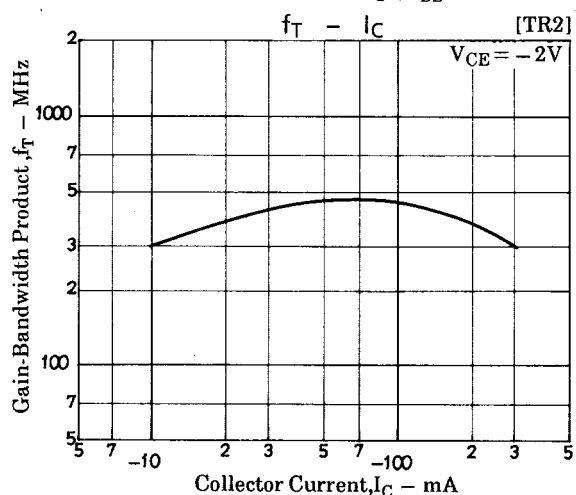
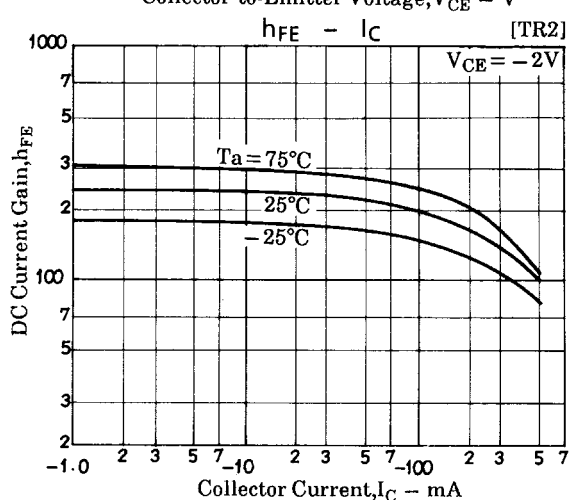
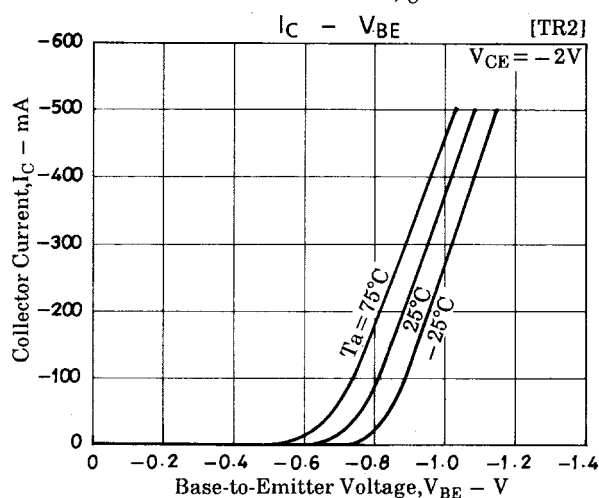
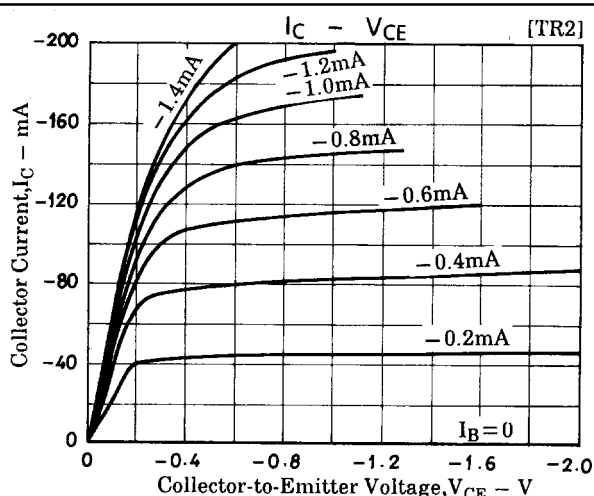
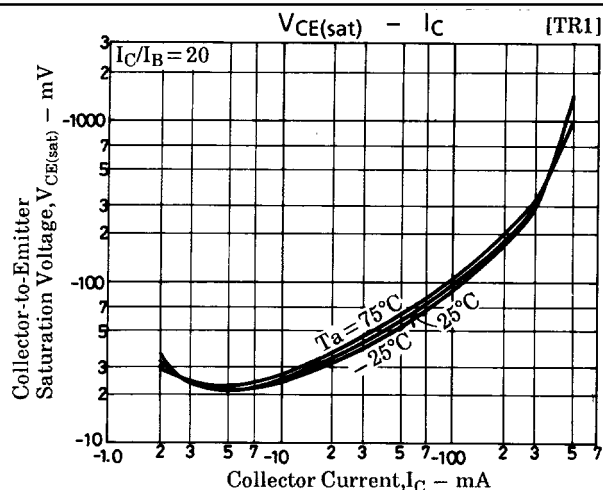
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Electrical Characteristics at $T_a = 25^\circ\text{C}$

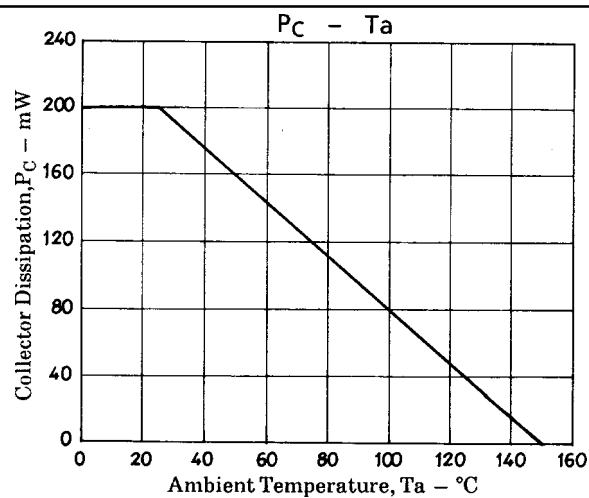
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
[TR1]						
Collector Cutoff Current	I_{CBO}	$V_{CB} = -15\text{V}, I_E = 0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$	-210	-270	-390	μA
DC Current Gain	h_{FE}	$V_{CE} = -2\text{V}, I_C = -100\text{mA}$	100			
Gain-Bandwidth Product	f_T	$V_{CE} = -2\text{V}, I_C = -50\text{mA}$		150		MHz
Output Capacitance	C_{ob}	$V_{CE} = -10\text{V}, f = 1\text{MHz}$		5		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$		-100	-250	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-20			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-15			V
Input-OFF-State Voltage	$V_{I(off)}$	$V_{CE} = -5\text{V}, I_C = -100\mu\text{A}$	-0.7	-0.80	-0.95	V
Input-ON-State Voltage	$V_{I(on)}$	$V_{CE} = -0.2\text{V}, I_C = -10\text{mA}$	-0.85	-1.2	-1.8	V
Input Resistance	R1		3.3	4.7	6.1	V
Resistance Ratio	R1/R2			0.47		k Ω
[TR2]						
Collector Cutoff Current	I_{CBO}	$V_{CB} = -15\text{V}, I_E = 0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}, I_C = -10\text{mA}$	160		560	
	$h_{FE(2)}$	$V_{CE} = -2\text{V}, I_C = -400\text{mA}$	70			MHz
Gain-Bandwidth Product	f_T	$V_{CE} = -2\text{V}, I_C = -50\text{mA}$		400		pF
Output Capacitance	C_{ob}	$V_{CE} = -10\text{V}, f = 1\text{MHz}$		6.5		mV
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -200\text{mA}, I_B = -10\text{mA}$		-200	-360	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -200\text{mA}, I_B = -10\text{mA}$		-0.95	-1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-20			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-15			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_C = -10\mu\text{A}, I_C = 0$	-5			V



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