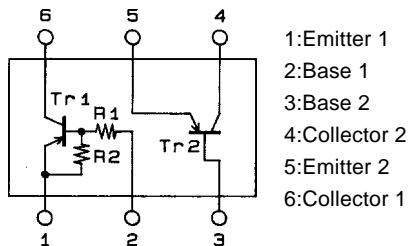


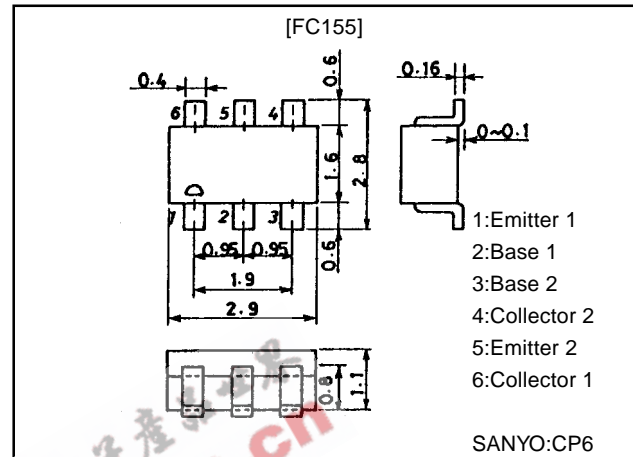
SANYO**FC155**PNP Epitaxial Planar Silicon Transistor (With bias resistances)
PNP Epitaxial Planar Silicon Transistor**Constant-Current Circuit Applications****Features**

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

Electrical Connection**Package Dimensions**

unit:mm

2104A

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

Parameter	Symbol	Conditions	Ratings	Unit
[TR1]				
Collector-to-Base Voltage	V_{CBO}		-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_{CBO}		-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

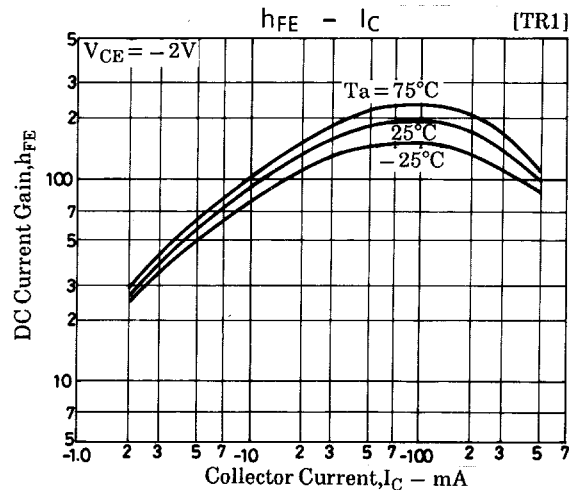
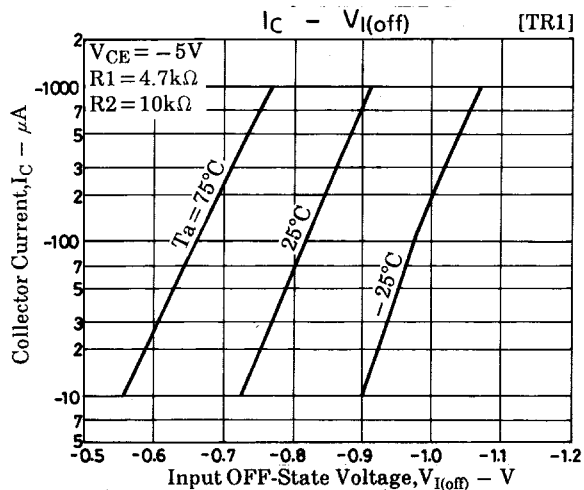
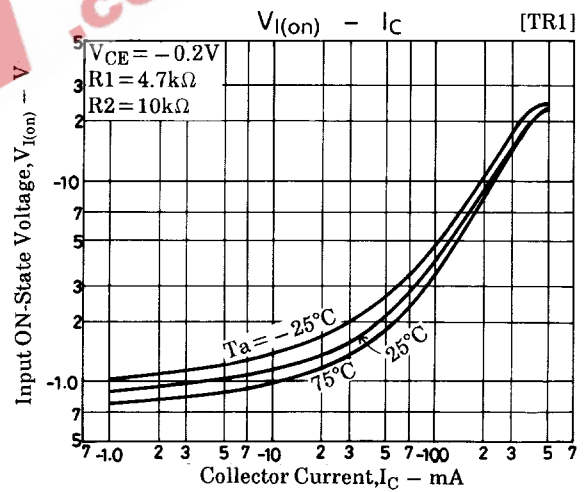
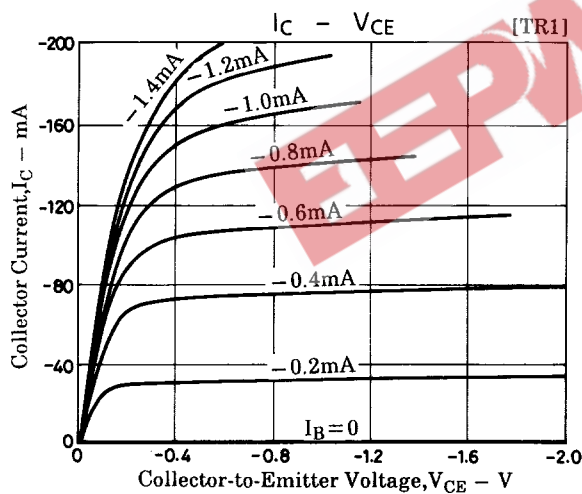
SANYO Electric Co.,Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

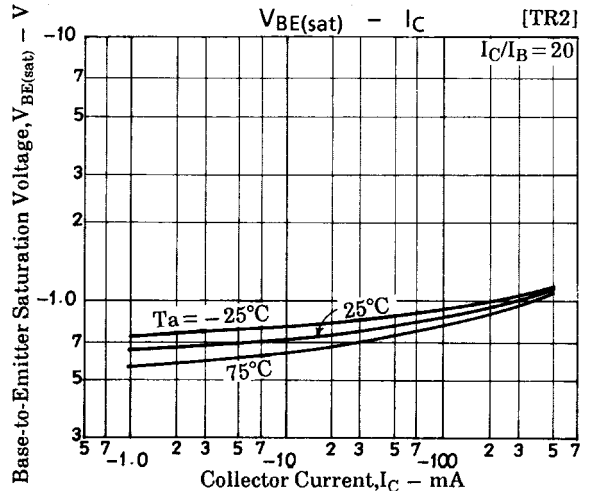
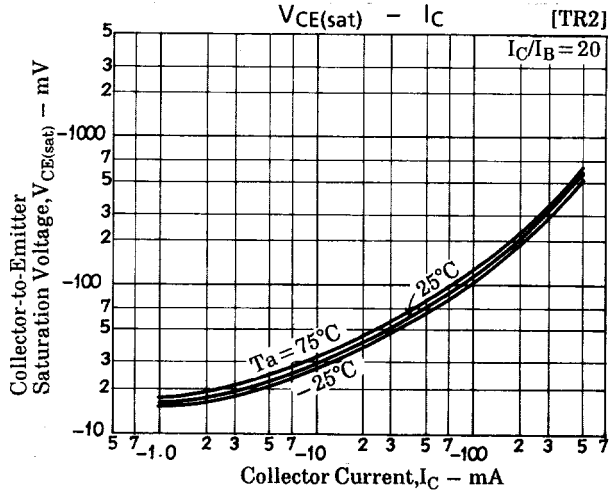
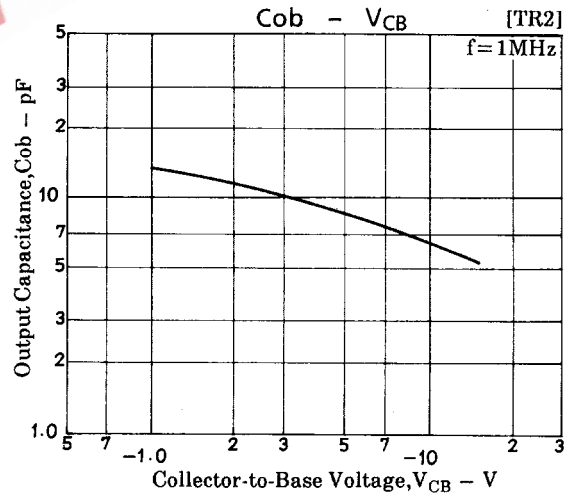
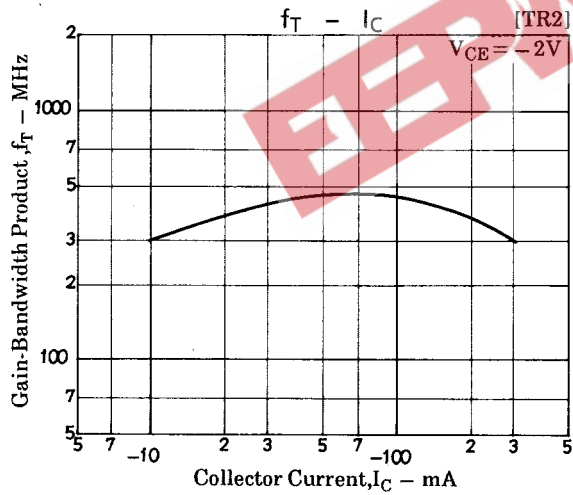
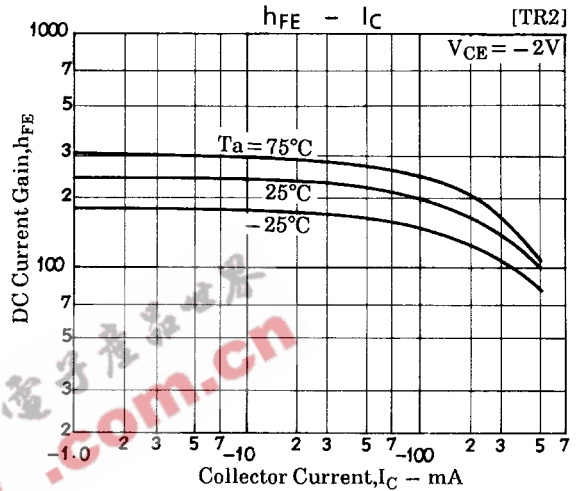
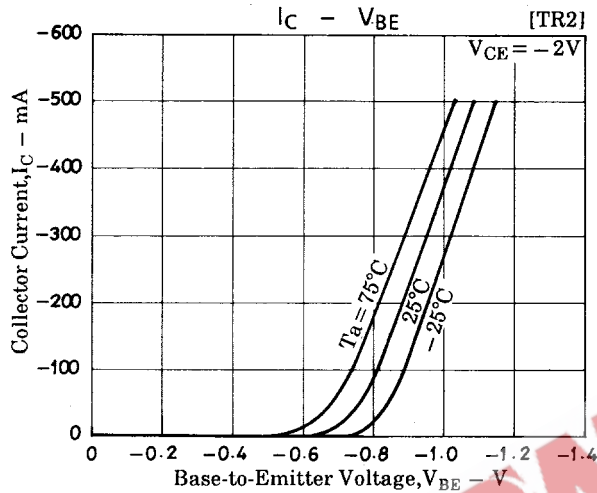
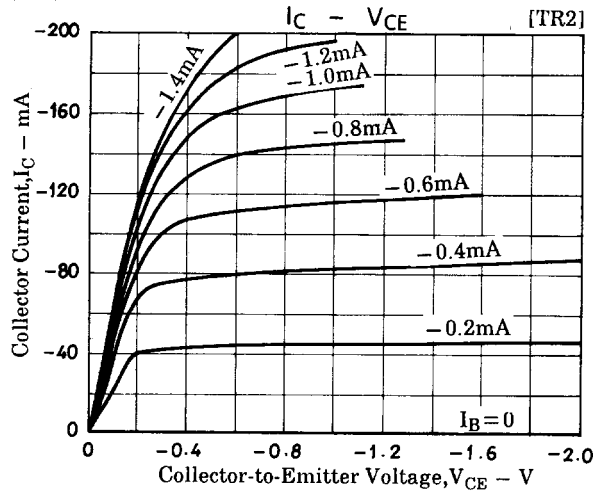
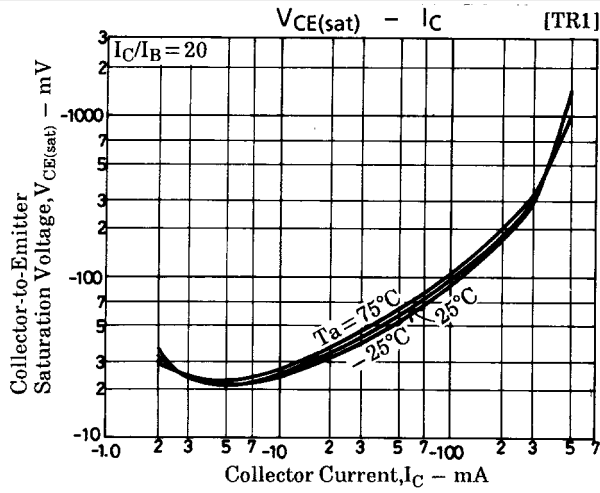
FC155

Electrical Characteristics at Ta = 25°C

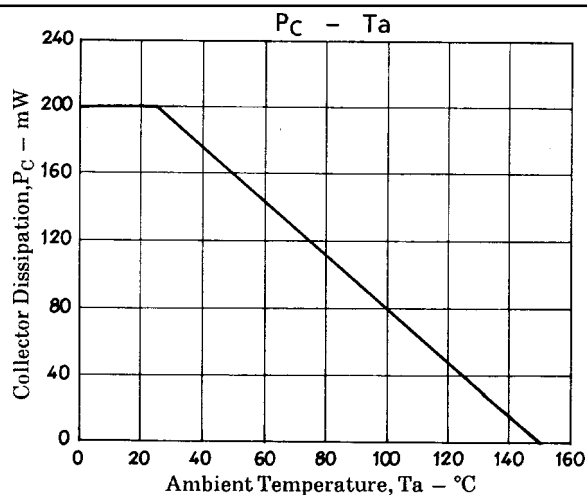
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
[TR1]						
Collector Cutoff Current	I_{CBO}	$V_{CB}=-15V, I_E=0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-4V, I_C=0$	-210	-270	-390	μA
DC Current Gain	h_{FE}	$V_{CE}=-2V, I_C=-100mA$	100			
Gain-Bandwidth Product	f_T	$V_{CE}=-2V, I_C=-50mA$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



FC155



FC155



EFPW 电子产品世界
.com.cn

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of May, 1998. Specifications and information herein are subject to change without notice.