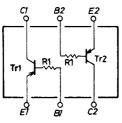


# FC135 PNP Epitaxial Planar Silicon Composite Transistor Switching Applications (with Bias Resistance)

## Features

- · On-chip bias resistance (R1=4.7k $\Omega$ )).
- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- $\cdot$  The FC135 is formed with two chips, being equivalent to the 2SA1510, placed in one package.
- $\cdot$  Excellent in thermal equilibrium and pair capability.

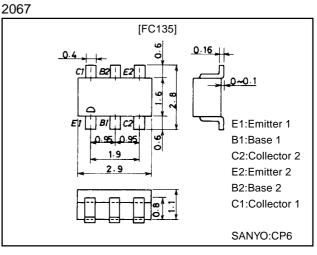
### **Electrical Connection**



E1:Emitter 1 B1:Base 1 C2:Collector 2 E2:Emitter 2 B2:Base 2 C1:Collector 1

## **Package Dimensions**

unit:mm



# **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		-50	V
Collector-to-Emitter Voltage	VCEO		-50	V
Emitter-to-Base Voltage	VEBO		-5	V
Collector Current	IC		-100	mA
Peak Collector Current	ICP		-200	mA
Collector Dissipation	PC	1 unit	200	mW
Total Power Dissipation	PT		300	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

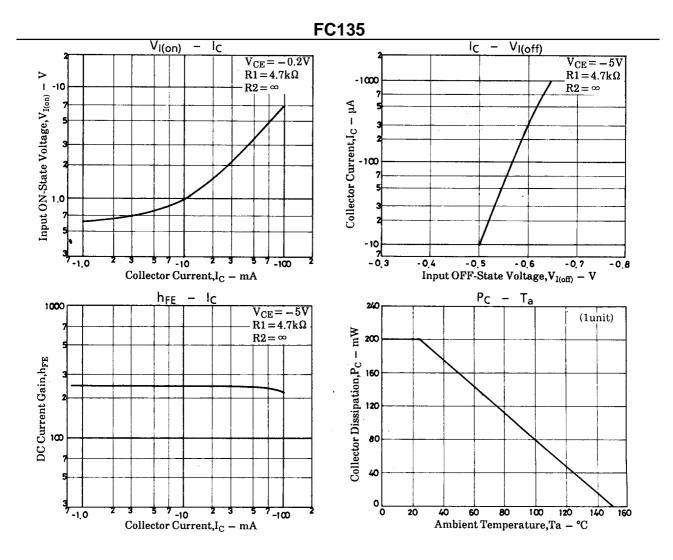
### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	ICBO	V <sub>CB</sub> =-40V, I <sub>E</sub> =0			-0.1	μA
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-0.1	μA
DC Current Gain	hFE	V <sub>CE</sub> =-5V, I <sub>C</sub> =-10mA	100			
Gain-Bandwidth Product	fT	V <sub>CE</sub> =-10V, I <sub>C</sub> =-5mA		200		MHz
Output Capacitance	Cob	V <sub>CB</sub> =-10V, f=1MHz		5.1		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	IC=-10mA, IB=-0.5mA		-0.1	-0.3	V
C-B Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =-10µA, I <sub>E</sub> =0	-50			V
C-E Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =–100µA, R <sub>BE</sub> =∞	-50			V
Input OFF-State Voltage	V <sub>I(off)</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-100µA	-0.4	-0.55	-0.8	V
Input ON-State Voltage	V <sub>I(on)</sub>	V <sub>CE</sub> =-0.2V, I <sub>C</sub> =-10mA	-0.6	-1.0	-2.0	V
Input Resistance	R1		3.3	4.7	6.1	kΩ

Note: The specifications shown above are for each individual transistor.

Marking:135

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