

Ordering number:EN3280



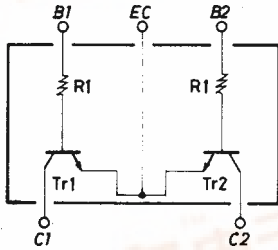
# FC126

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

### Features

- On-chip bias resistance ( $R1=47k\Omega$ ).
- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC126 is formed with two chips, being equivalent to the 2SC3898, placed in one package.
- Excellent in thermal equilibrium and pair capability.

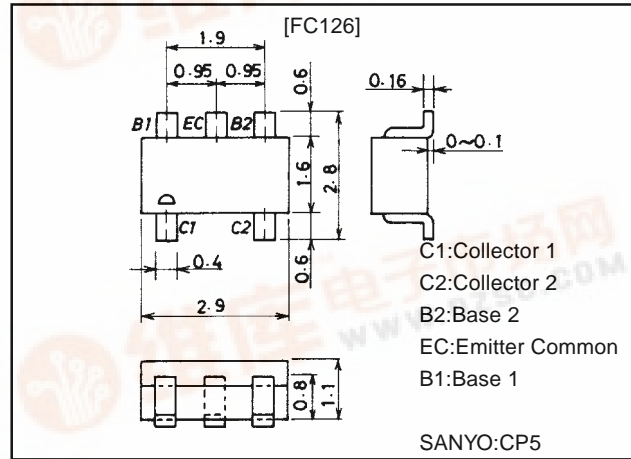
### Electrical Connection



### Package Dimensions

unit:mm

2066



### Specifications

#### Absolute Maximum Ratings at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		50	V
Collector-to-Emitter Voltage	$V_{CEO}$		50	V
Emitter-to-Base Voltage	$V_{EBO}$		5	V
Collector Current	$I_C$		100	mA
Peak Collector Current	$I_{CP}$		200	mA
Collector Dissipation	$P_C$	1 unit	200	mW
Total Power Dissipation	$P_T$		300	mW
Junction Temperature	$T_J$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

#### Electrical Characteristics at $T_a = 25^\circ C$

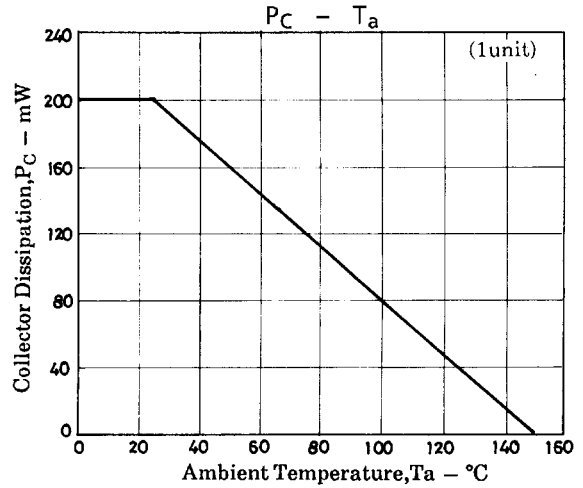
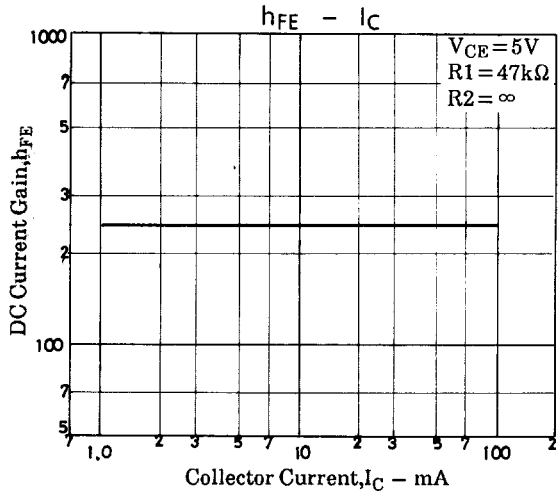
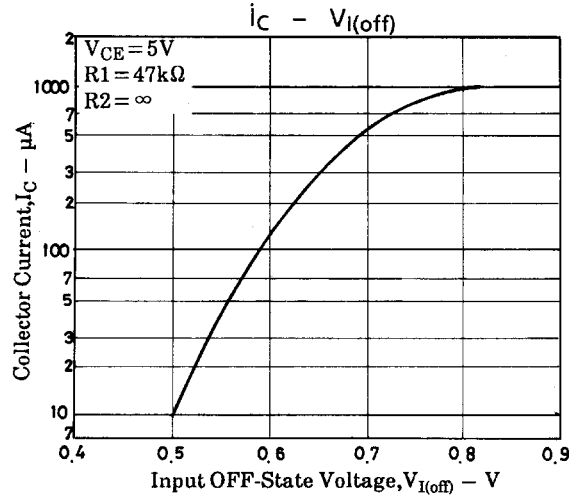
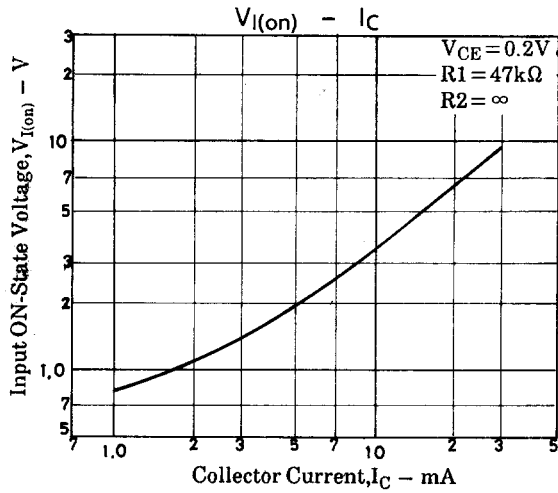
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=40V, I_E=0$			0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=10mA$	100			
Gain-Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=5mA$		250		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$		3.3		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=5mA, I_B=0.25mA$		0.1	0.3	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	50			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=100\mu A, R_{BE}=\infty$	50			V
Input OFF-State Voltage	$V_{I(off)}$	$V_{CE}=5V, I_C=100\mu A$	0.4	0.55	0.8	V
Input ON-State Voltage	$V_{I(on)}$	$V_{CE}=0.2V, I_C=5mA$	0.8	2.0	4.0	V
Input Resistance	$R1$		33	47	61	k $\Omega$

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

Marking:126



## FC126



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