Ordering number:EN3077

FC109

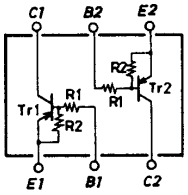
PNP Epitaxial Planar Silicon Composite Transistor

Switching Applications

Features

- On-chip bias resistors (R1=22kΩ, R2=22kΩ)
- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC109 is formed with two chips, being equivalent to the 2SA1342, placed in one package.
- Excellent in thermal equilibrium and pair capability.

Electrical Connection

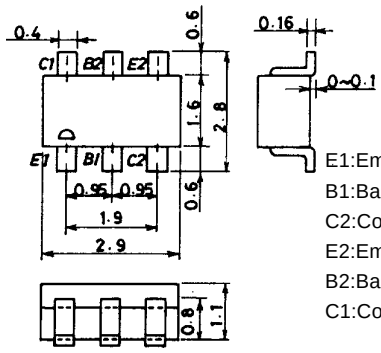


Package Dimensions

unit:mm

2067

[FC109]



E1:Emitter1
B1:Base1
C2:Collerctor2
E2:Emitter2
B2:Base2
C1:Collector1

SANYO:CP6

Specifications

Absolute Maximum Ratings at Ta = 25˚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}		–10	V
Collector Current	I_C		–100	mA
Collector Current (Pulse)	I_{CP}		–200	mA
Collector Dissipation	P_C	1 unit	200	mW
Total Dissipation	P_T		300	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to+150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=–40V, I_E=0			–0.1	μA
Collector Cutoff Current	I_{CEO}	V_{CE}=–40V, I_B=0			–0.5	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=–5V, I_C=0	–70	–113	–160	μA
DC Current Gain	h_{FE}	V_{CE}=–5V, I_C=–5mA	50			
Gain-Bandwidth Product	f_T	V_{CE}=–10V, I_C=–5mA		200		MHz
Output Capacitance	Cob	V_{CB}=–10V, f=1MHz		5.1		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=–10mA. I_B=–0.5mA		–0.1	–0.3	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=–10μA, I_E=0	–50			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=–100μA, R_{BE}=∞	–50			V
Input OFF-State Voltage	$V_{I(off)}$	V_{CE}=–5V, I_C=–100μA	–0.8	–1.1	–1.5	V
Input ON-State Voltage	$V_{I(on)}$	V_{CE}=–0.2V, I_C=–5mA	–1.0	–1.9	–3.0	V
Input Resistance	R1		15	22	29	kΩ
Resistance Ratio	R1/R2		0.9	1.0	1.1	

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

Marking:109

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Sample Application Circuit