

FC104



2066

T-27-09

NPN Epitaxial Planar
Silicon Composite Transistor

Low-Frequency General-Purpose Amp, Differential Amp Applications

©3112

Features

- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC104 is formed with two chips, being equivalent to the 2SC4211, placed in one package.
- Excellent in thermal equilibrium and pair capability and suitable for use in differential amp.
- Common emitter.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V _{CB0}		55 V
Collector to Emitter Voltage	V _{CEO}		50 V
Emitter to Base Voltage	V _{EBO}		6 V
Collector Current	I _C		150 mA
Peak Collector Current	i _{cp}		300 mA
Base Current	I _B		30 mA
Collector Dissipation	P _C	1 unit	200 mW
Total Power Dissipation	P _T		300 mW
Junction Temperature	T _J		150 °C
Storage Temperature	T _{stg}		-55 to +150 °C

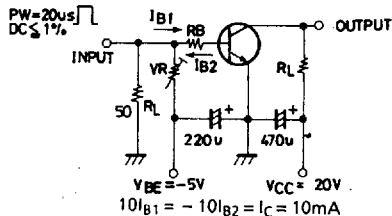
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = 35V, 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}	V _{CE} = 6V, I _C = 1mA	160		600	
DC Current Gain Ratio	h _{FE} (small/large)	V _{CE} = 6V, I _C = 1mA	0.8	0.98		
Base to Emitter Voltage Drop	V _{BE} (large-small)	V _{CE} = 6V, I _C = 1mA		1.0	15	mV
Gain-Bandwidth Product	f _T	V _{CE} = 6V, I _C = 10mA		200		MHz
Output Capacitance	c _{ob}	V _{CB} = 6V, f = 1MHz		1.7		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = 50mA, I _B = 5mA	0.08	0.4		V
B-E Saturation Voltage	V _{BE(sat)}	I _C = 50mA, I _B = 5mA	0.8	1.0		V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	55			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	50			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	6			V
Turn-ON Time	t _{on}	See specified Test Circuit.		0.15		μs
Storage Time	t _{stg}			0.75		μs
Fall Time	t _f			0.20		μs

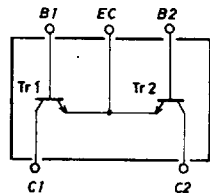
Note) The specifications shown above are for each individual transistor.

Marking : 104

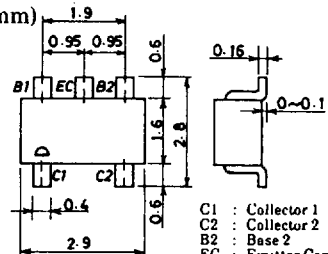
Switching Time Test Circuit



Electrical Connection (unit : mm)

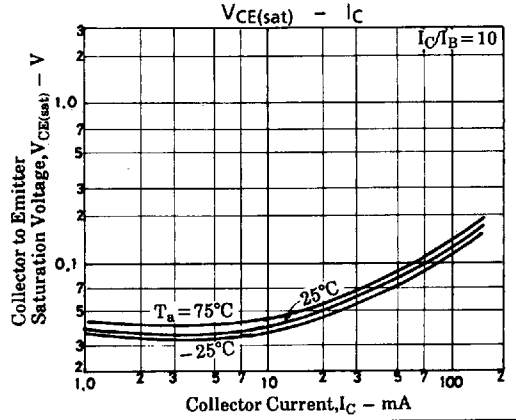
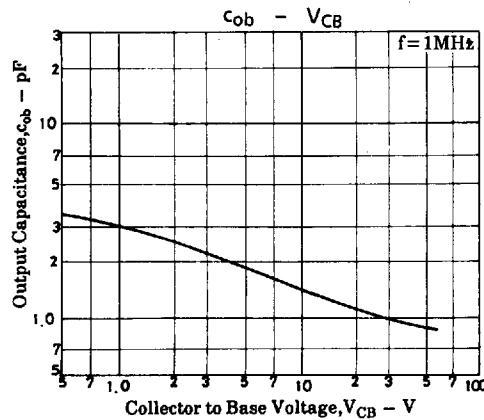
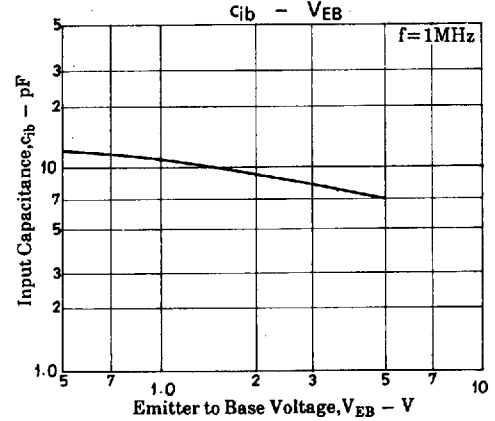
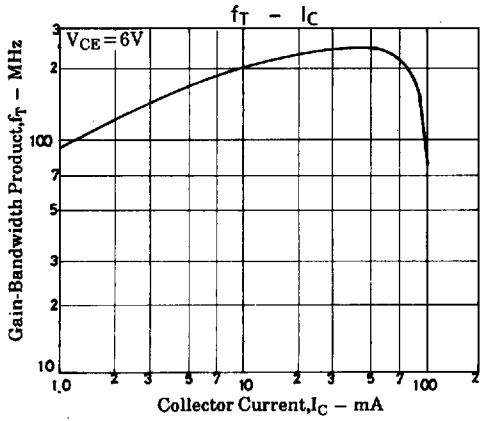
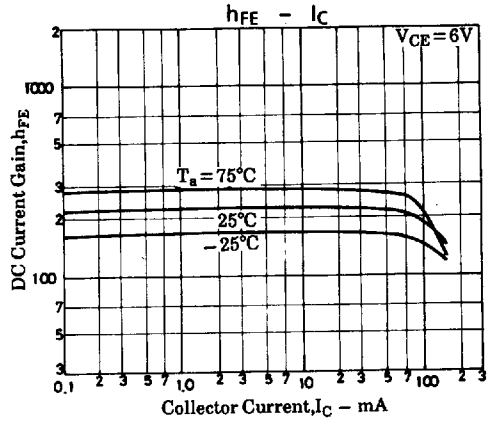
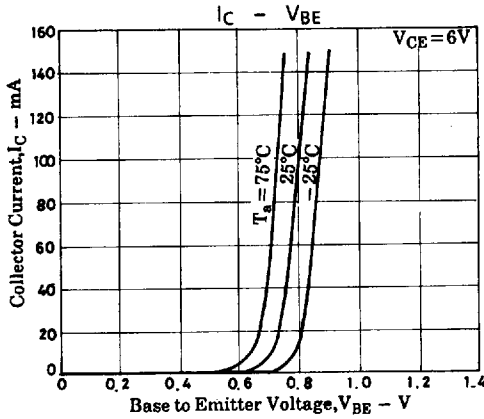
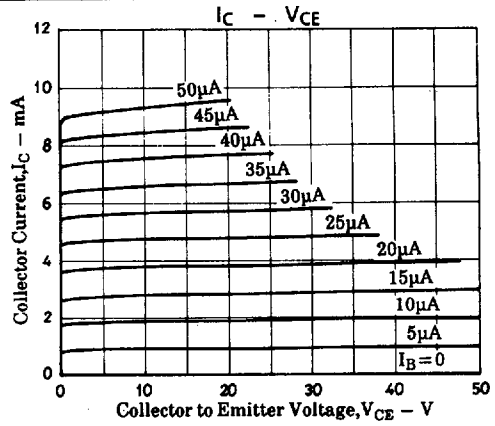
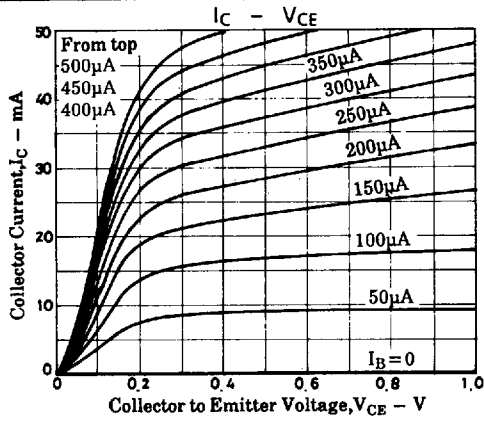


Case Outline 2066



- C1 : Collector 1
 - C2 : Collector 2
 - B2 : Base 2
 - EC : Emitter Common
 - B1 : Base 1
- SANYO : CP5

6299MO,TS No.3112-1/3



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