



SANYO Semiconductors

## DATA SHEET

# 3MN03SF — NPN Epitaxial Planar Silicon Transistor

## High-Frequency General-Purpose Amplifier Applications

### Features

- Small package allows applied sets to be made small and thin.

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CB0</sub>		30	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>		20	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		5	V
Collector Current	I <sub>C</sub>		30	mA
Collector Dissipation	P <sub>C</sub>	Mounted on a ceramic board (600mm <sup>2</sup> ×0.8mm)	150	mW
Junction Temperature	T <sub>J</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°C

**Electrical Characteristics** at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0A			0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0A			0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	60		200	
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	200	320		MHz
Reverse Transfer Capacitance	C <sub>re</sub>	V <sub>CB</sub> =6V, f=1MHz		0.8	1.3	pF
Noise Figure	NF	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA, f=100MHz		3.0		dB

Marking : WA

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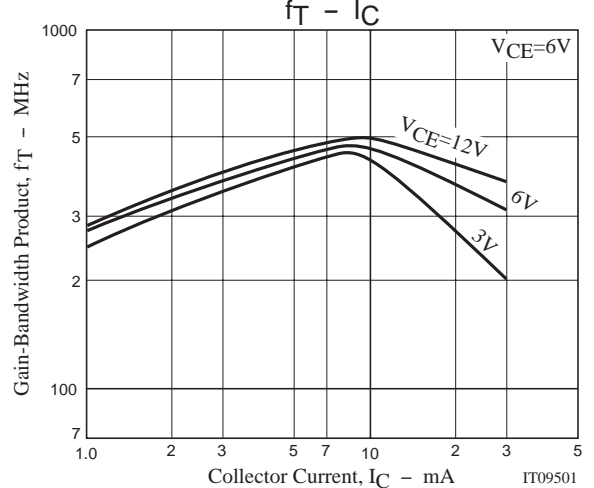
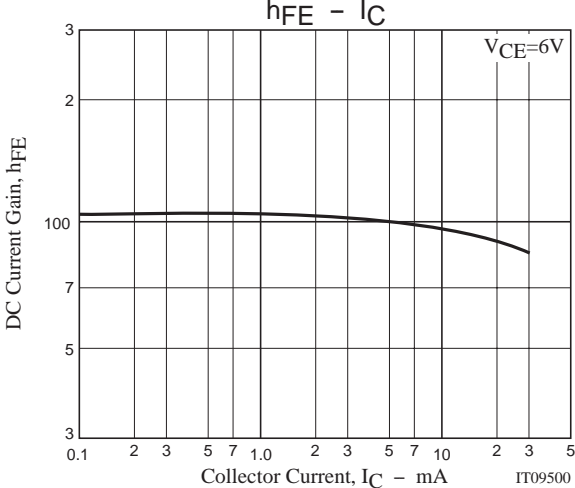
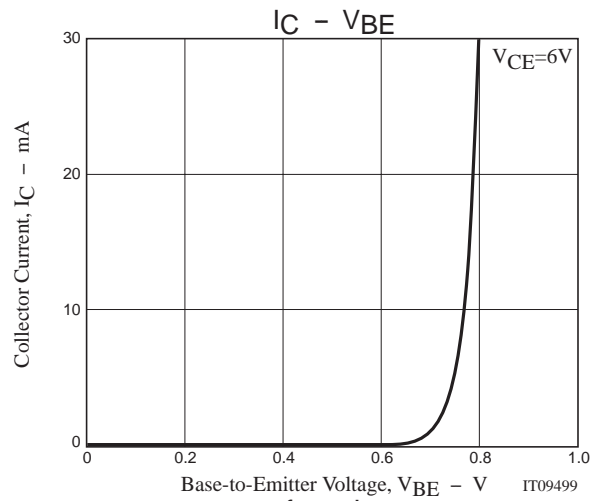
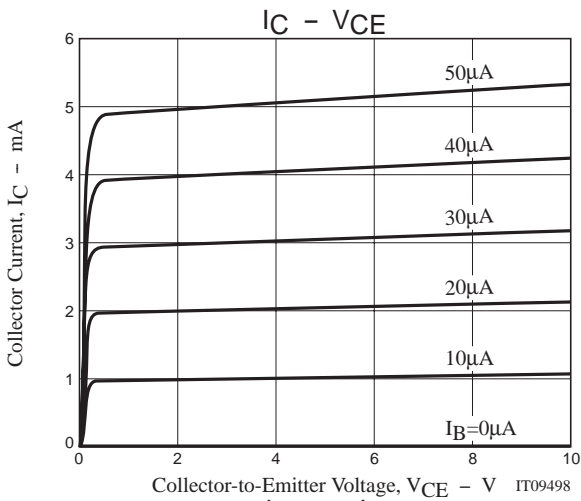
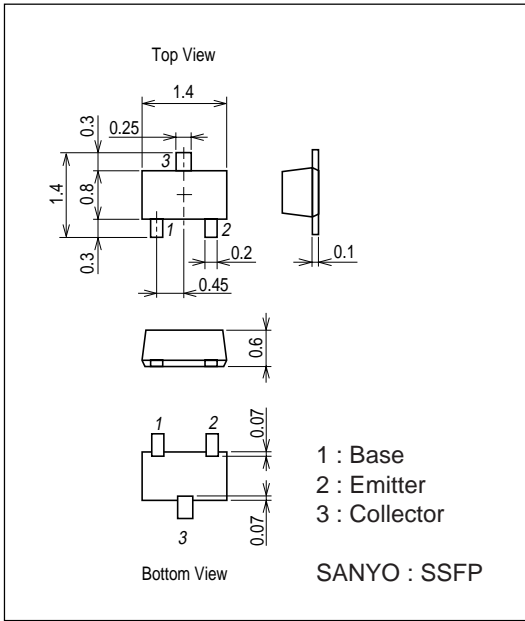
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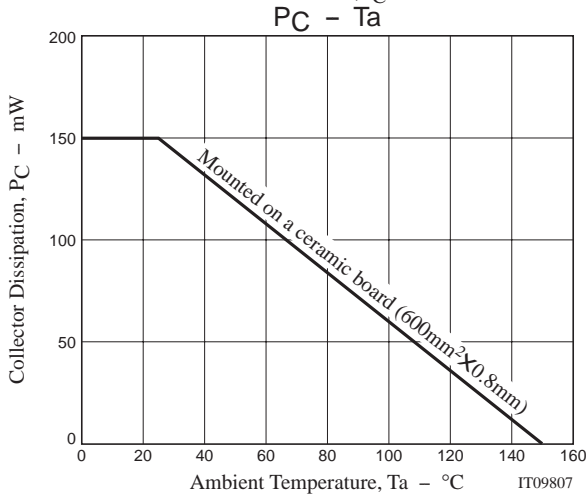
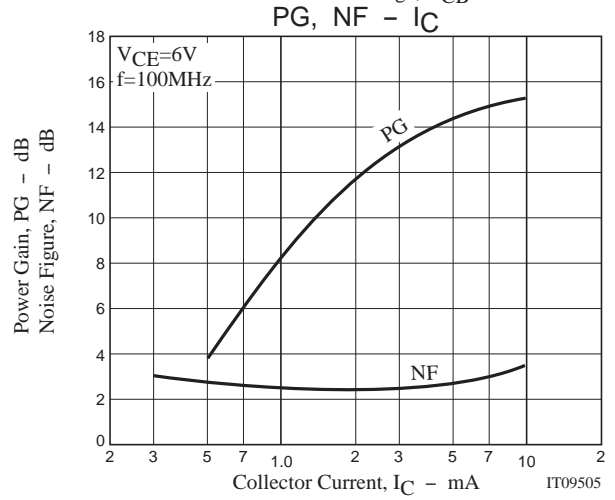
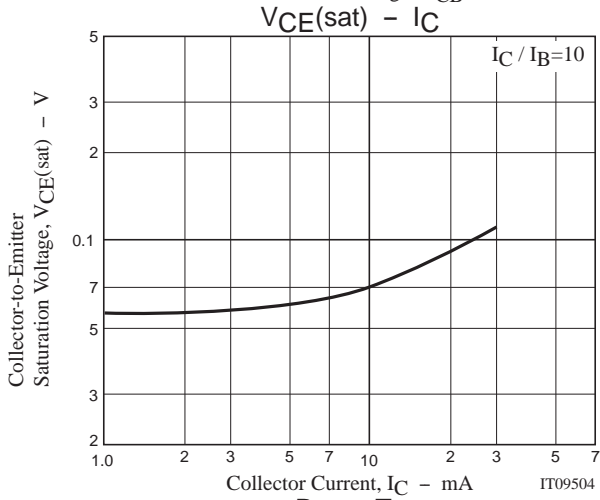
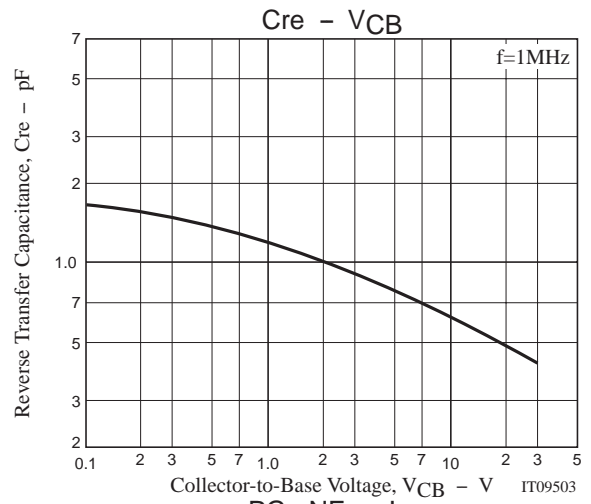
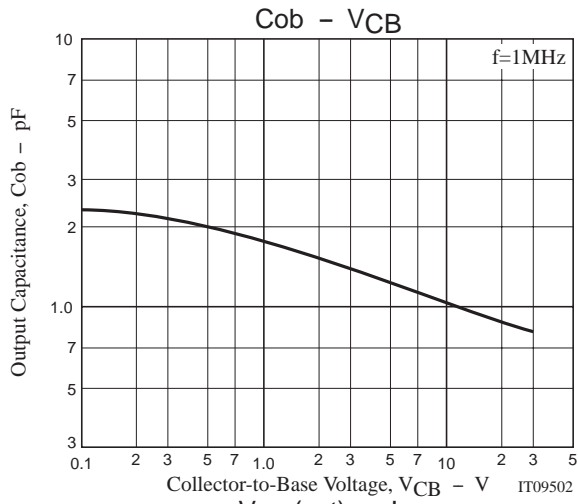
# 3MN03SF

## Package Dimensions

unit : mm  
7029-002



# 3MN03SF



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