



SANYO Semiconductors

DATA SHEET

CPH6002 — NPN Epitaxial Planar Silicon Transistor

High-Frequency Medium-Power Amplifier Applications

Features

- High f_T ($f_T=3.0\text{GHz}$ typ).
- Large current ($I_C=200\text{mA}$).
- Large collector dissipation (800mW max).

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		40	V
Collector-to-Emitter Voltage	V_{CEO}		30	V
Emitter-to-Base Voltage	V_{EBO}		2	V
Collector Current	I_C		200	mA
Collector Dissipation	P_C	Mounted on a ceramic board (900mm ² ×0.8mm)	800	mW
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=20\text{V}$, $I_E=0\text{A}$			1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=1\text{V}$, $I_C=0\text{A}$			5.0	μA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=50\text{mA}$	100		200	
Gain-Bandwidth Product	f_T	$V_{CE}=5\text{V}$, $I_C=50\text{mA}$		3.0		GHz
Output Capacitance	C_{ob}	$V_{CB}=5\text{V}$, $f=1\text{MHz}$		2.7		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=5\text{V}$, $f=1\text{MHz}$		1.9		pF

Marking : GB

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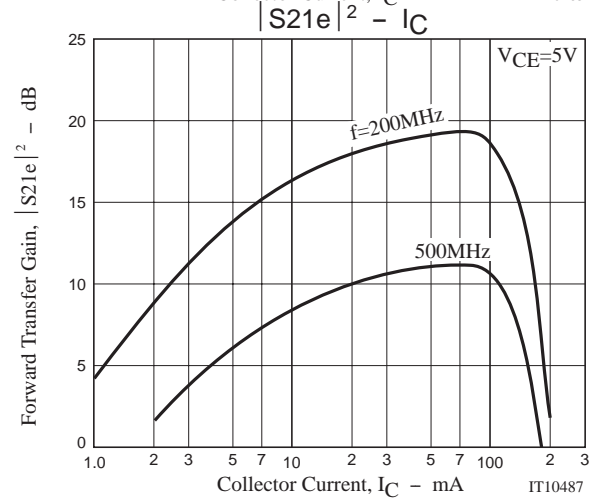
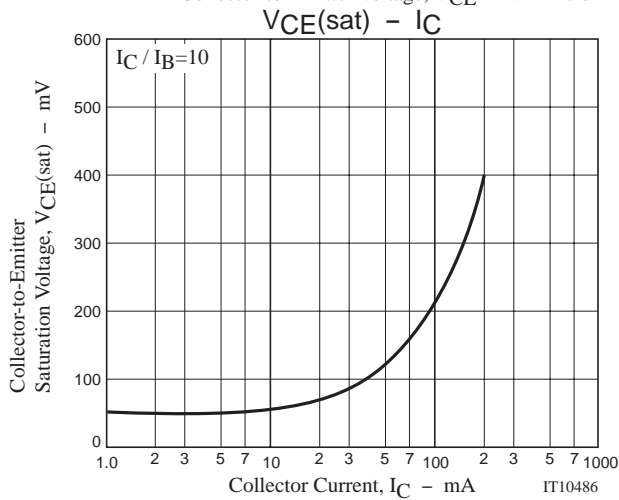
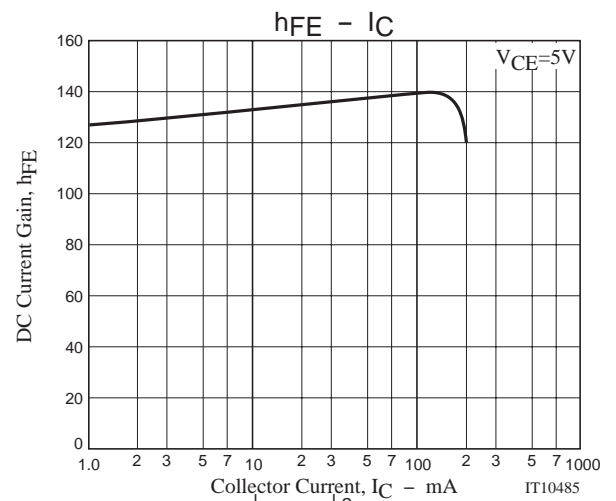
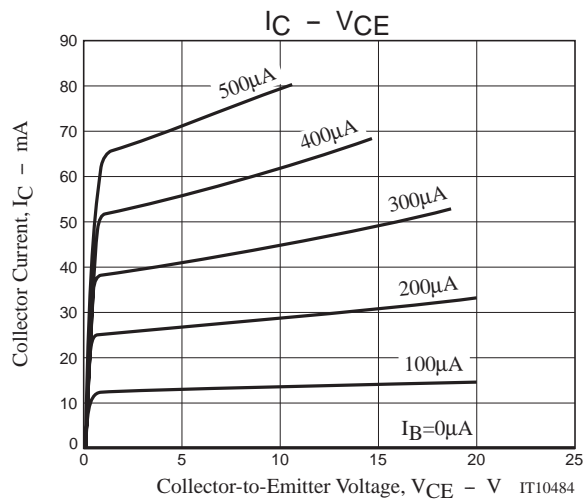
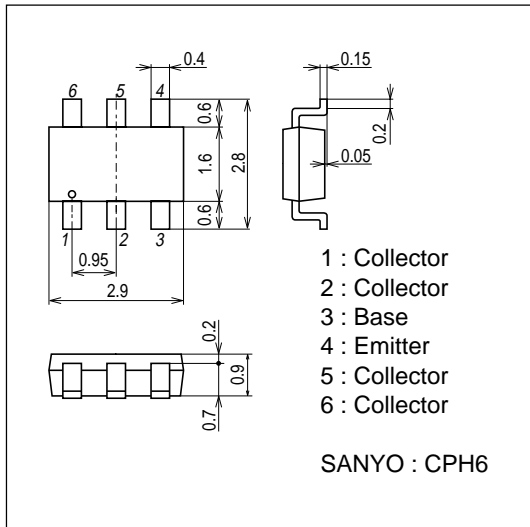
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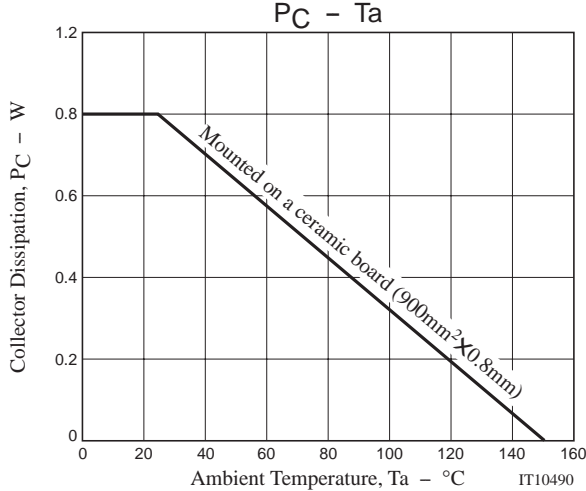
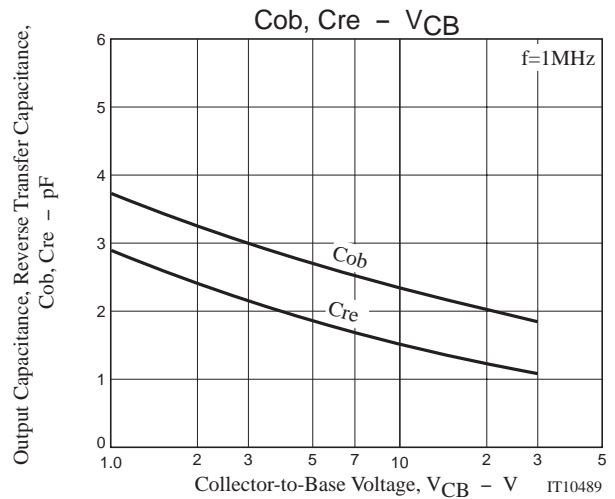
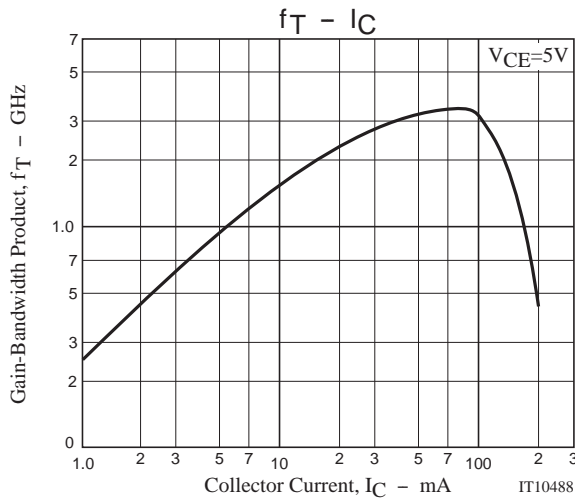
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Package Dimensions

unit : mm

7018-002





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