



SANYO Semiconductors

DATA SHEET

4MP10CH — PNP Epitaxial Planar Silicon Transistor

High-Frequency General-Purpose Amplifier Applications

Features

- High f_T : $f_T=400\text{MHz}$ (typ).
- High breakdown voltage : $V_{CE0} \geq 200\text{V}$.
- Small reverse transfer capacitance and excellent high-frequency characteristic : $C_{re}=1.7\text{pF}$.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		-200	V
Collector-to-Emitter Voltage	V_{CE0}		-200	V
Emitter-to-Base Voltage	V_{EB0}		-4	V
Collector Current	I_C		-100	mA
Collector Current (Pulse)	I_{CP}		-200	mA
Collector Dissipation	P_C	Mounted on a ceramic board (600mm ² ×0.8mm)	600	mW
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=-150\text{V}$, $I_E=0\text{A}$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-2\text{V}$, $I_C=0\text{A}$			-1.0	μA
DC Current Gain	h_{FE1}	$V_{CE}=-10\text{V}$, $I_C=-10\text{mA}$	60		200	
	h_{FE2}	$V_{CE}=-10\text{V}$, $I_C=-60\text{mA}$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=-30\text{V}$, $I_C=-30\text{mA}$		400		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-30\text{mA}$, $I_B=-3\text{mA}$			-0.6	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}$, $I_E=0\text{A}$	-200			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $R_{BE}=\infty$	-200			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$, $I_C=0\text{A}$	-4			V
Output Capacitance	C_{ob}	$V_{CB}=-30\text{V}$, $f=1\text{MHz}$		2.3		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=-30\text{V}$, $f=1\text{MHz}$		1.7		pF

Marking : GR

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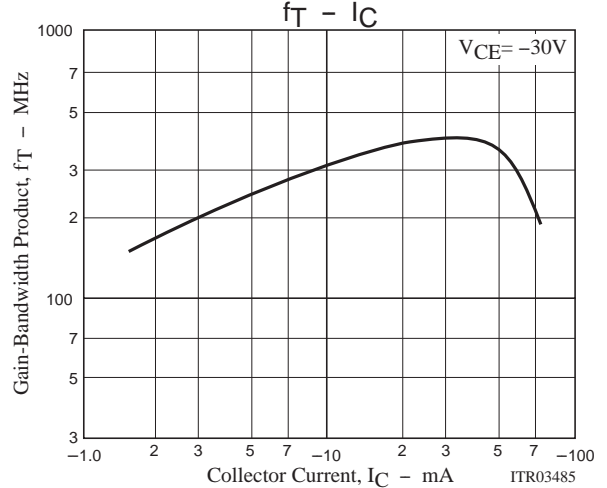
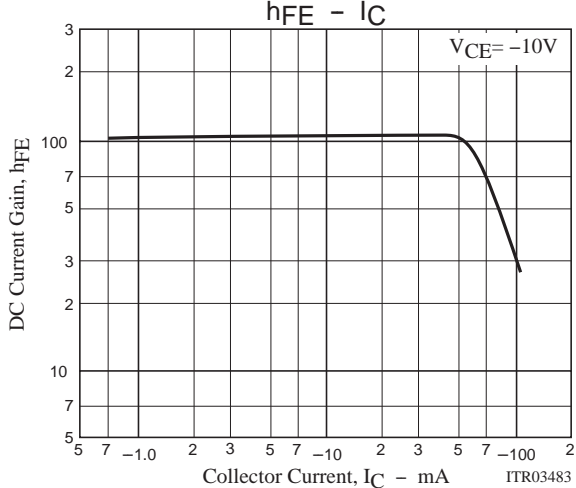
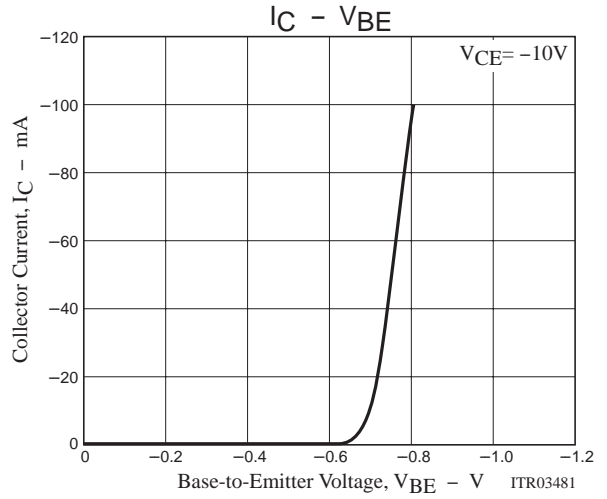
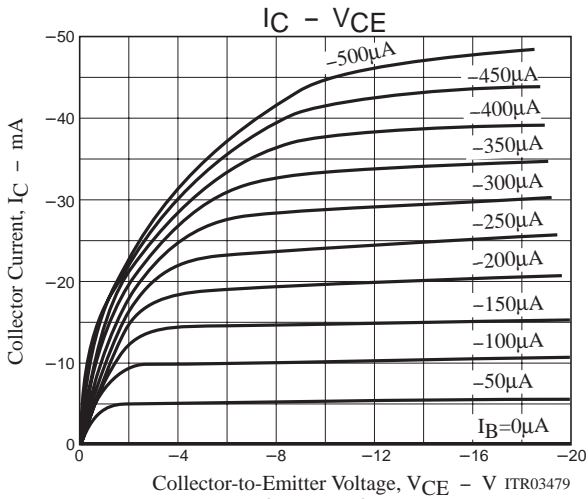
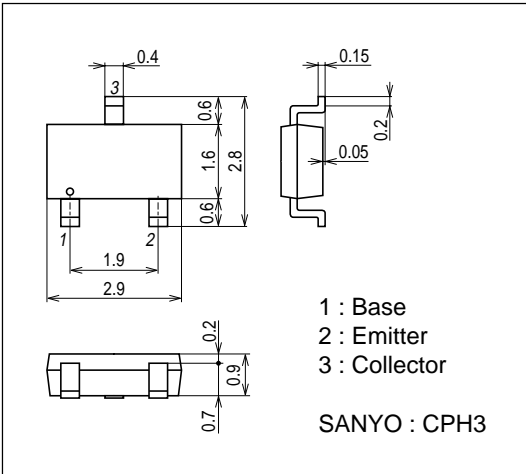
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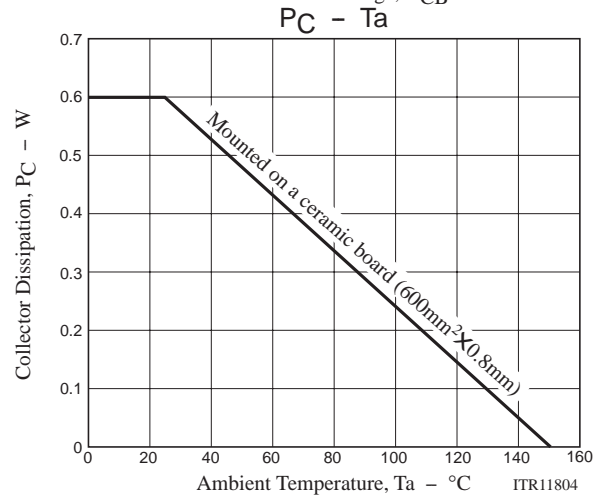
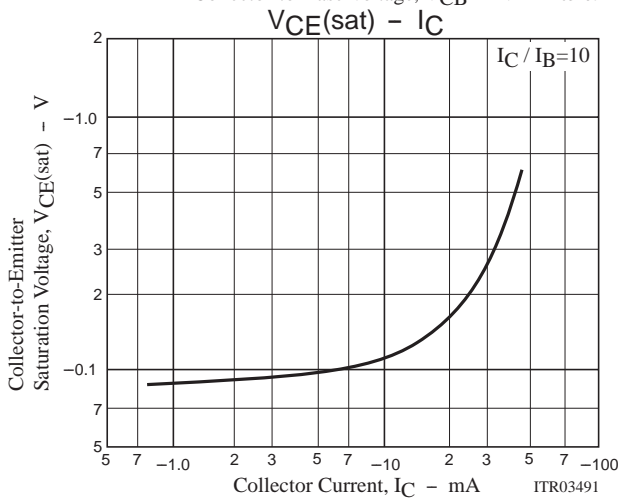
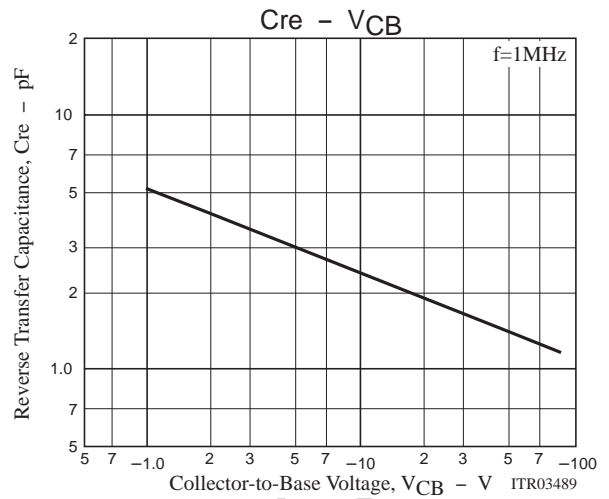
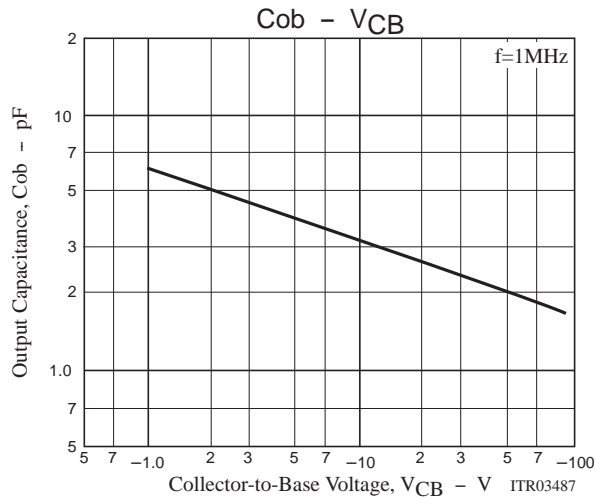
SANYO Electric Co., Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Package Dimensions

unit : mm
7015-003





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