

**CPH6521**

Low-Frequency General-Purpose Amplifier, Drivers Applications

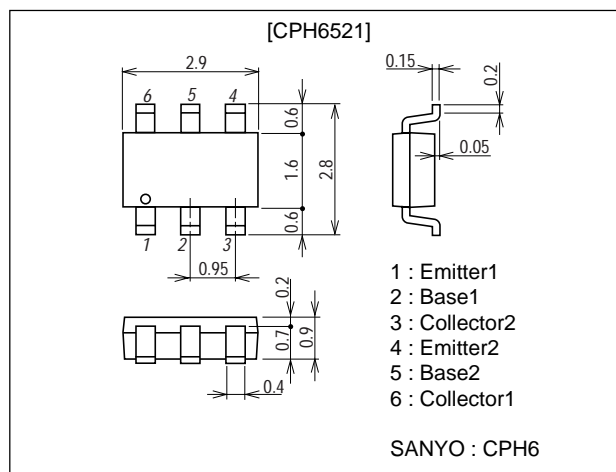
Features

- Composite type with 2 transistors contained in the CPH package currently in use, improving the mounting efficiency greatly.
- The CPH6521 is formed with two chips, being equivalent to the 2SA1813 / 2SC3689, placed in one package.
- Adoption of FBET process.
- High DC current gain.
- High VEBO.

Package Dimensions

unit : mm

2187



Specifications

() : PNP

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-30)60	V
Collector-to-Emitter Voltage	V _{CEO}		(-25)50	V
Emitter-to-Base Voltage	VEBO		(-15)	V
Collector Current	I _C		(-150)100	mA
Collector Current (Pulse)	I _{CP}		(-300)200	mA
Base Current	I _B		(-30)20	mA
Collector Dissipation	P _C	1unit	350	mW
Total Dissipation	P _T		500	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CB0}	V _{CB} =(-20)40V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EB0}	V _{EB} =(-)10V, I _C =0			(-)0.1	μA
DC Current Gain	h _{FE}	V _{CE} =(-)5V, I _C =(-)1mA	800 (500)	1500 (800)	3200 (1200)	

Marking : 3H

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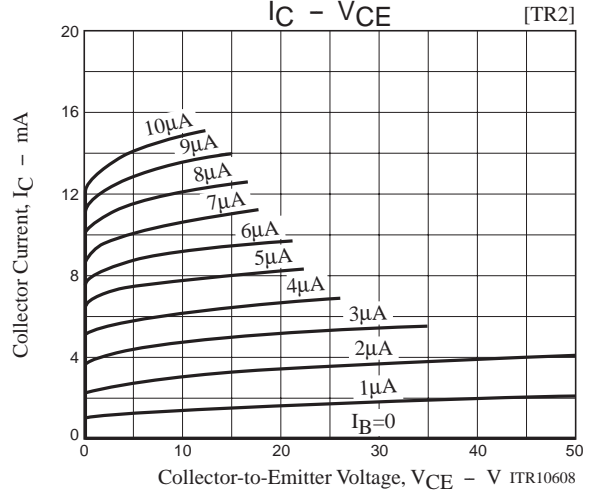
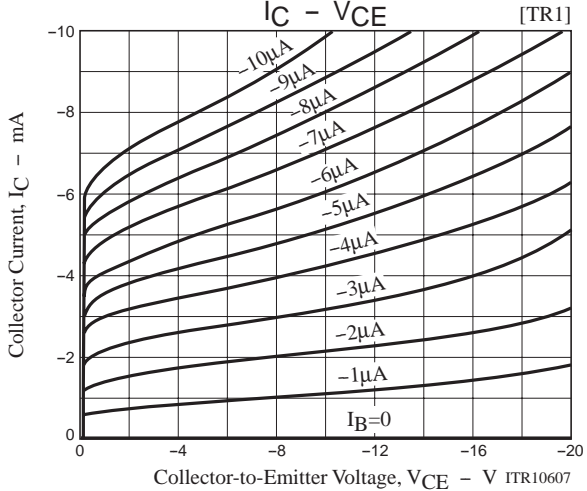
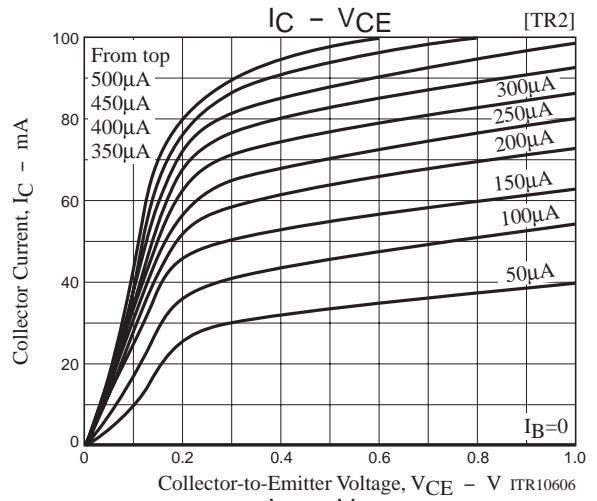
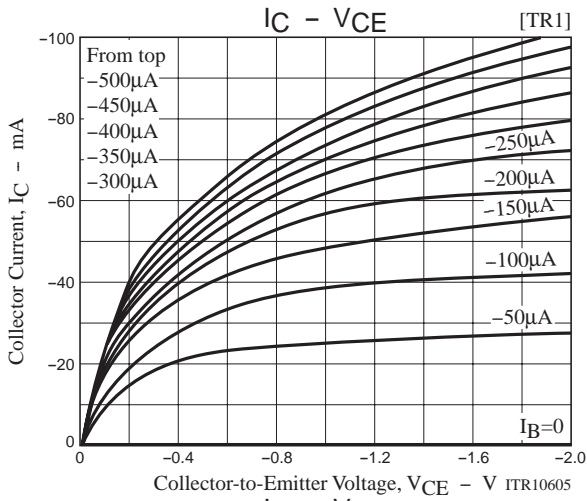
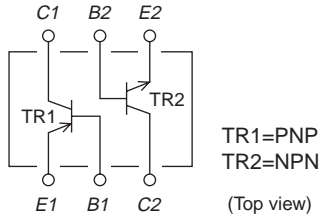
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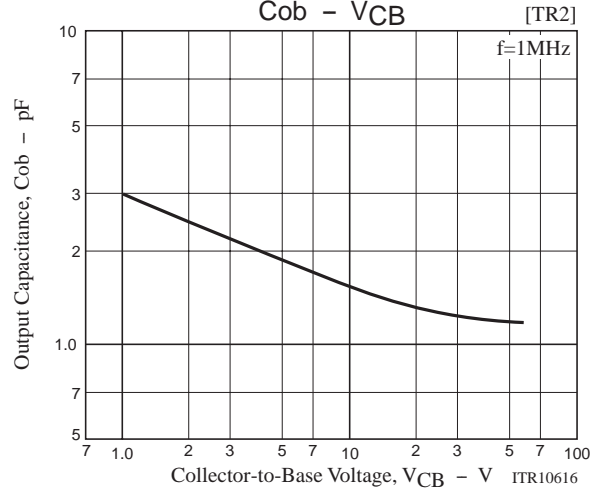
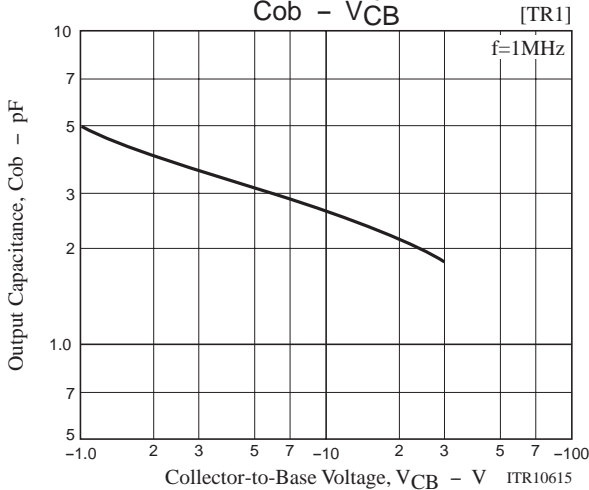
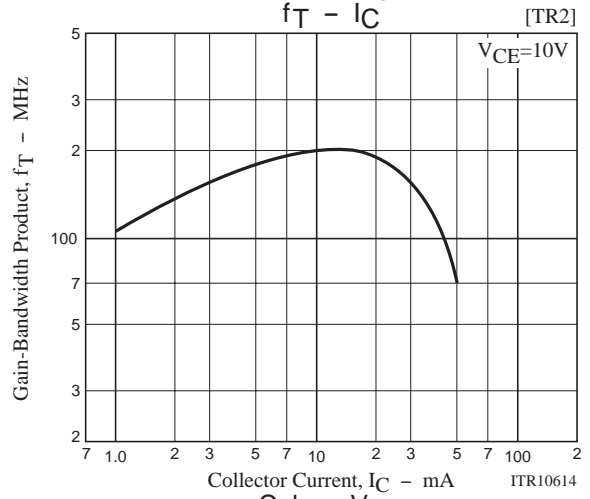
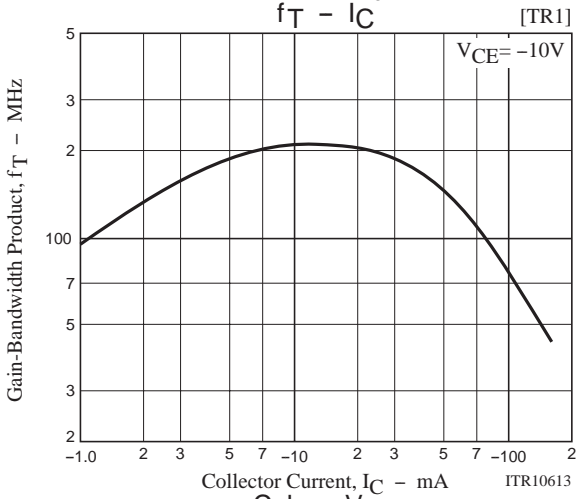
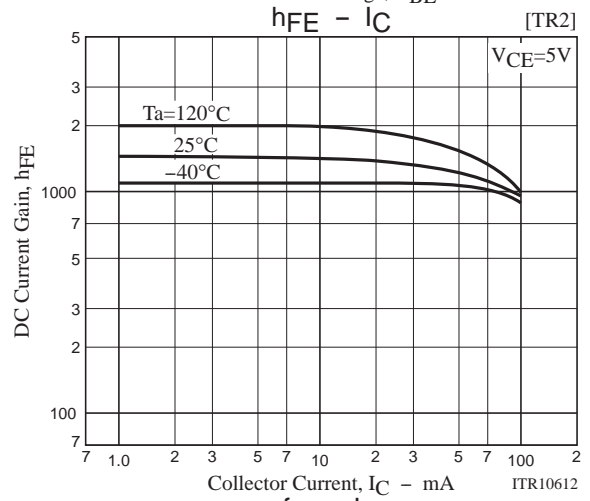
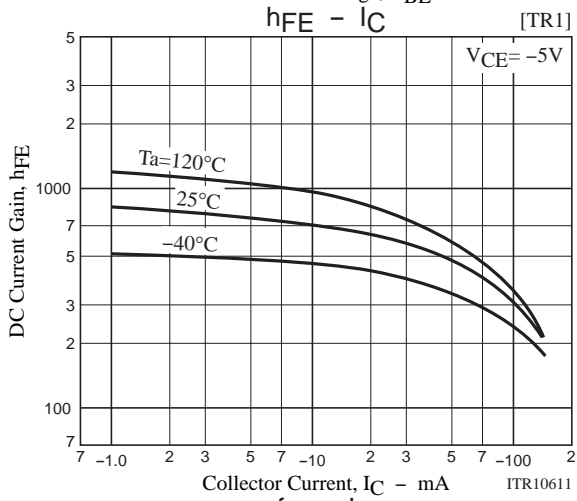
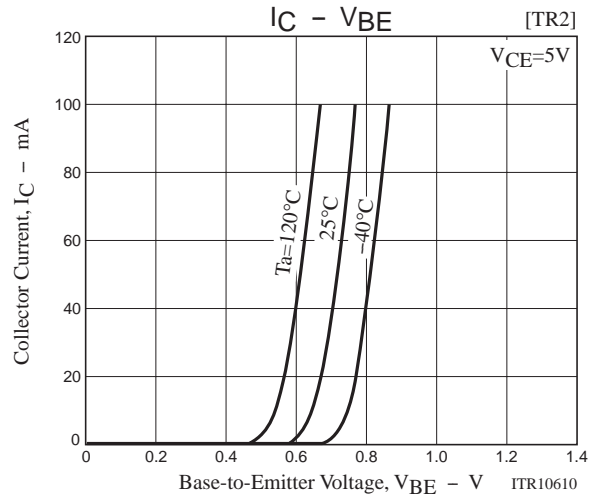
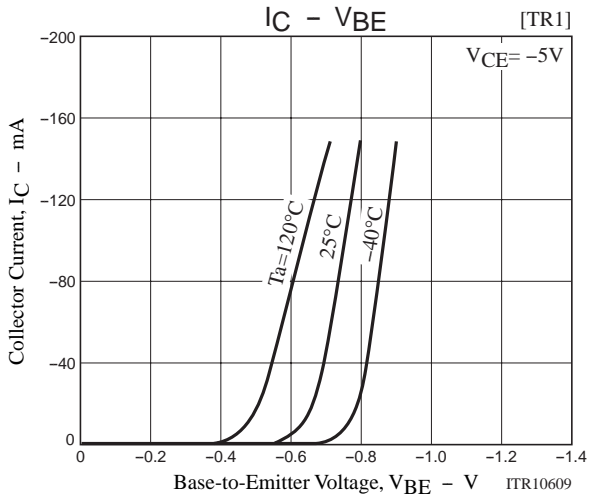
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)10mA$		(210)200		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(2.6)1.5		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)50mA, I_B=(-)1mA$		(-0.15)0.1	(-)0.3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)50mA, I_B=(-)1mA$		(-0.78)0.8	(-)1.1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-30)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-25)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-)15			V

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

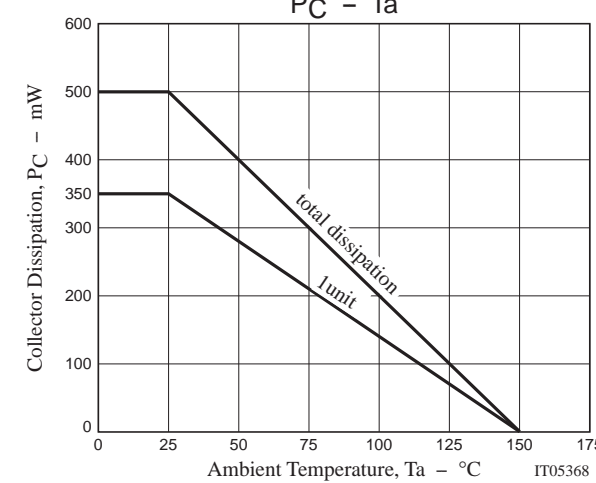
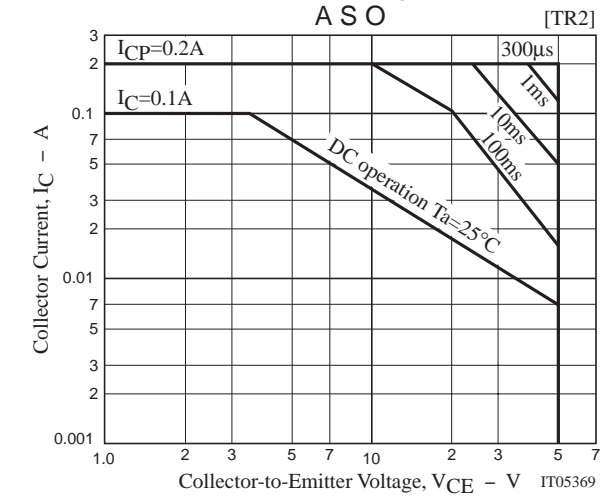
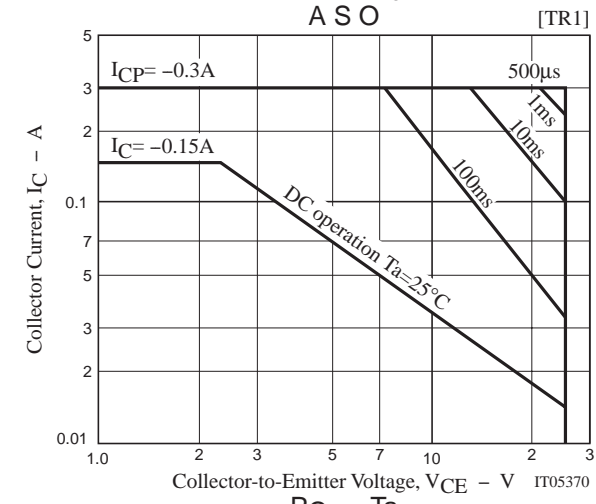
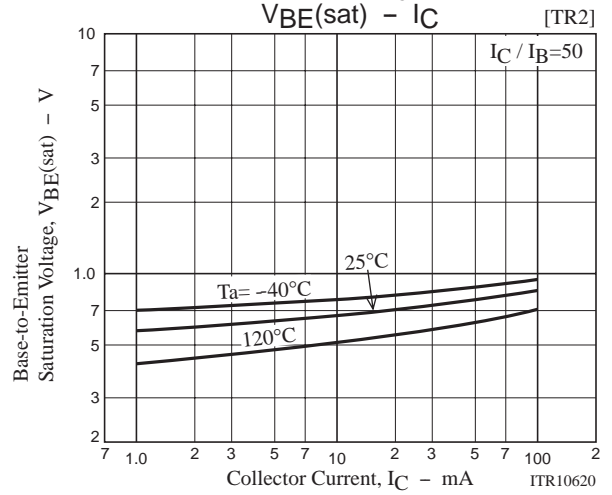
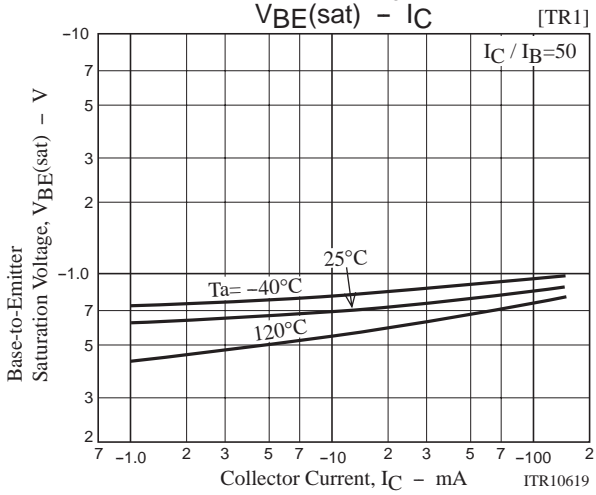
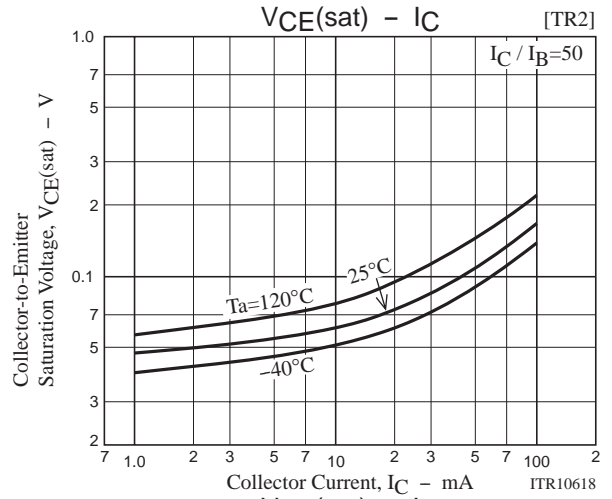
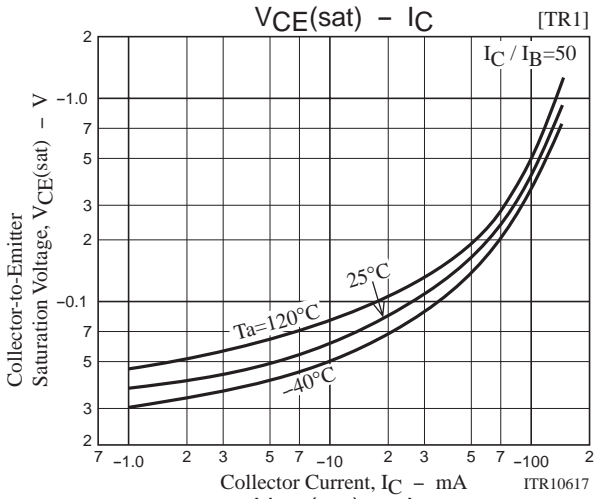
Electrical Connection



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