Ordering number : ENN7385

NPN Epitaxial Planar Silicon Composite Transistor

CPH6517

Low-Frequency General-Purpose Amplifier Applications

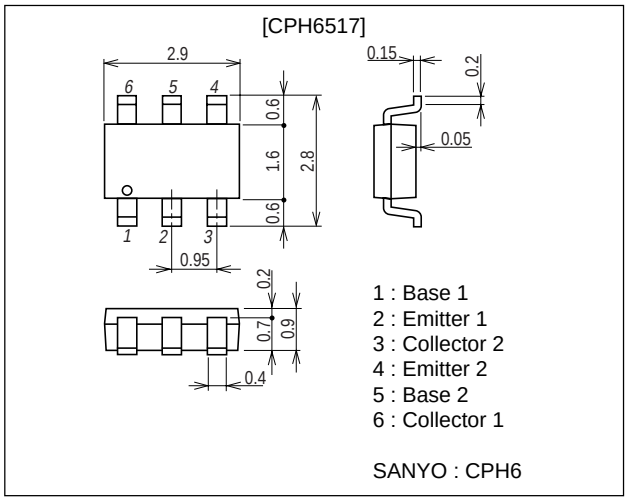
Features

- Composite type with 2 transistors contained in the CPH package currently in use, improving the mounting efficiency greatly.
- The CPH6517 is formed with two chips, being equivalent to the 2SC4555, placed in one package.
- Low collector to emitter saturation voltage.
- Excellent in thermal equilibrium and pair capability.

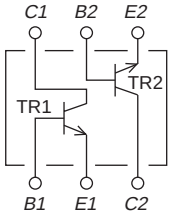
Package Dimensions

unit : mm

2212



Electrical Connection



(Top view)

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		20	V
Collector-to-Emitter Voltage	V_{CEO}		15	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		500	mA
Collector Current(Pulse)	I_{CP}		1	A
Base Current	I_B		100	mA
Collector Dissipation	P_C	1unit	350	mW
Total Dissipation	P_T		500	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=15V, I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0			0.1	μA

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

Continued on next page.

Marking : 3B

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Continued from preceding page.

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	$h_{FE}1$	V_{CE}=2V, I_C=10mA	160		560	
	$h_{FE}2$	V_{CE}=2V, I_C=400mA	80			
DC Current Gain Ratio	h_{FE}(Small / Large)	V_{CE}=2V, I_C=10mA	0.8	0.98		
Gain-Bandwidth Product	f_T	V_{CE}=2V, I_C=50mA		300		MHz
Output Capacitance	Cob	V_{CB}=10V, f=1MHz		4		pF
Collector-to-Emitter Saturation Voltage	V_{CE}(sat)1	I_C=5mA, I_B=0.5mA		15	30	mV
	V_{CE}(sat)2	I_C=200mA, I_B=10mA		160	300	mV
Base-to-Emitter Saturation Voltage	V_{BE}(sat)	I_C=200mA, I_B=10mA		0.95	1.2	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	20			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	15			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	5			V