Ordering number : ENN7403

PNP Epitaxial Planar Silicon Composite Transistor

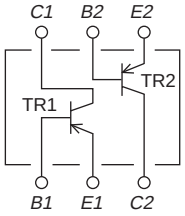
CPH6516

Low-Frequency General-Purpose Amplifier Applications

Features

- Composite type with 2 transistors and in the CPH package currently in use, improving the mounting efficiency greatly.
- The CPH6516 is formed with two chips, being equivalent to the 2SA1745, placed in one package.
- Low collector to emitter saturation voltage.
- Excellent in thermal equilibrium and pair capability.

Electrical Connection

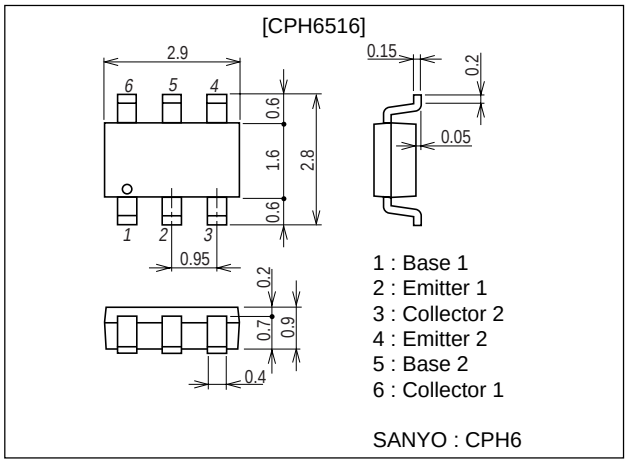


(Top view)

Package Dimensions

unit : mm

2212



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 : 3A

SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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	70			
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		400		MHz
Output Capacitance	Cob	V_{CE}=–10V, f=1MHz		6.5		pF
Collector-to-Emitter Saturation Voltage	V_{CE}(sat)1	I_C=–5mA, I_B=–0.5mA		–15	–35	mV
	V_{CE}(sat)2	I_C=–200mA, I_B=–10mA		–200	–360	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