

High-Current Switching Applications

Applications

 DC-DC converter, relay drivers, lamp drivers, motor drivers, strobes.

Features

- · Adoption of FBET, MBIT processes.
- · High current capacitance.
- · Low collector-to-emitter saturation voltage.
- · High-speed switching.
- · Ultrasmall package permitting applied sets to be made small and slim (0.9mm).
- · High allowable power dissipation.

(): CPH6104

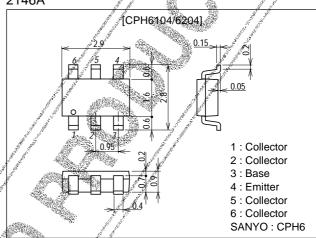
Specifications

Absolute Maximum Ratings at Ta = 25°C

Package Dimensions

unit:mm

2146A



Parameter		Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage		V _{CB} O.	www.186418.96et4U.86m	(-)15	V
Collector-to-Emitter Voltage		VCEO		(–)15	V
Emitter-to-Base Voltage		VEBO		(–)5	V
Collector Current	1	⁷ lc [∞]		(-)1.5	Α
Collector Current (Pulse)	g g de g	I _{CP}		(–)3	Α
Base Current		l B		(-)200	mA
Collector Dissipation	A 300	Pc	Mounted on a ceramic board (600mm²×0.8mm)	1.3	W
Junction Temperature	///	· , Ţį		150	°C
Storage Temperature		Tstg	11	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

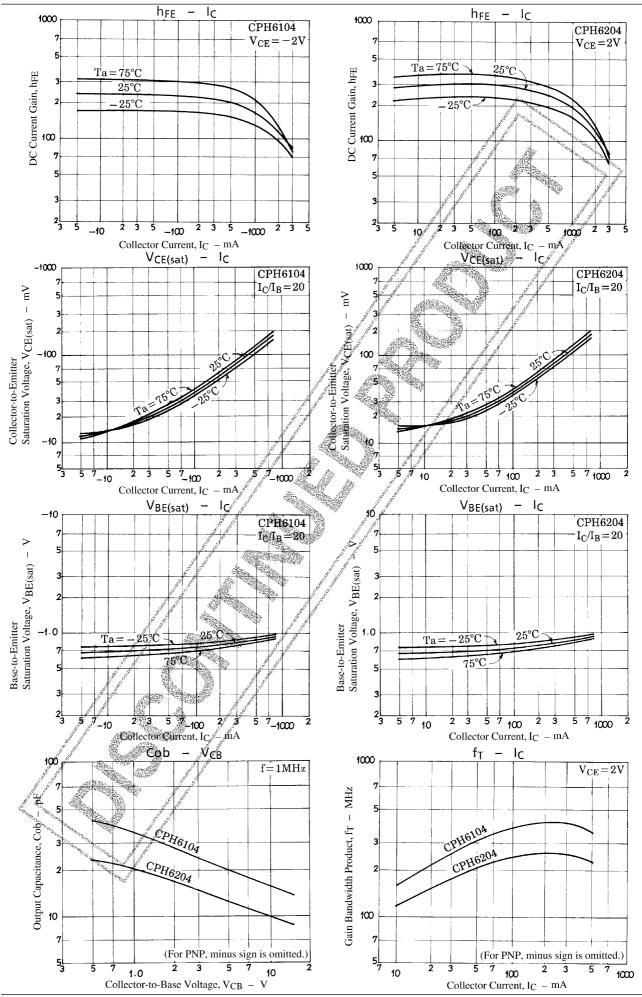
Parameter	Symbol	Conditions	Ratings			Unit
raiameter	Symbol		min	typ	max	Offic
Collector Cutoff Current	Ісво	V _{CB} =(-)12V, I _E =0			(–)100	nA
Emitter Cutoff Current	I _{EBO} .	$V_{EB}=(-)4V, I_{C}=0$			(–)100	nA
DC Current Gain	hFB1	$V_{CE}=(-)2V, I_{C}=(-)50mA$	200		560	
1//	h _{FE} 2	V _{CE} =(-)2V, I _C =(-)800mA	80			
Gain-Bandwidth Product	f _T	V _{CE} =(-)2V, I _C =(-)50mA		(300)		MHz
				200		MHz
Output Capacitance	Cob	V _{CB} =(-)10V, f=1MHz		(15)10		pF

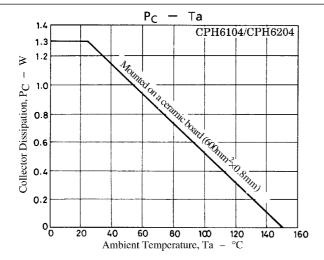
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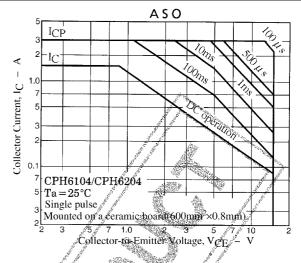
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Parameter	Symbol	Conditions		Ratings		Unit
Falametei	-		min	typ	max	
Collector-to-Emitter Saturation Voltage	V _{CE(sat)} 1	I _C =(-)5mA, I _B =(-)0.5mA		(-)10	(-)25	V
Dans to Facilities Only marking Valley	V _{CE(sat)} ²	I _C =(-)500mA, I _B =(-)25mA	25	(-)120	(-)240	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)500mA, I _B =(-)25mA	# 3%	(-)0.9	(–)1.2	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0	/ (-) 15	1774	Description of the second	V
Collector-to-Emitter Breakdown Voltage	V _(BR) CEO		(-)15	46350	Section of the second	
Emiller-to-base Breakdown Voltage	v(BR)EBO	IE=(-) ΙομΑ, IC=0	(-)3		Service A	V
Emitter-to-Base Breakdown Voltage $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	E CI 6 -0.8 e, VCE - VE CI 2 2 3 2 3 2 7 1	PH6104 PH6104	O.i. VCE	6 Ge, VCE -	CPH620 4 - V CPH62 V _{CE} = 2	1.0
0 -0.2 -0.4 -0.6 Base-to-Emitter Voltag	-0.8 -1. e, V _{BE} - V	0 -1.2 0 0.2 0.4 Base-to-Em	0.6 tter Voltag	0. 8 ge, V _{BE} -	1.0 - V	1.2







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