

**FP216** 

1:Base

2:Collector

4:Collector

6:Collector

7:Collector

SANYO:PCP5 (Bottom view)

5:Base

3:Emitter Common

0.2min

**NPN Epitaxial Planar Silicon Transistor** 

# **LCD Backlight Drive Applications**

[FP216]

0

(0.5)

**Package Dimensions** 

unit:mm

2097B

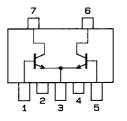
(0

4.25may

## Features

- · Composite type with 2 transistors contained in the PCP5 package currently in use, improving the mounting efficiency greatly.
- The FP216 is composed of two chips, each being equivalent to the 2SC3646, placed in one package.

## **Electrical Connection**



1:Base 2:Collector 3:Emitter Common 4:Collector 5:Base 6:Collector 7:Collector

(Top view)

## **Specifications**

## Absolute Maximum Ratings at Ta = 25°C

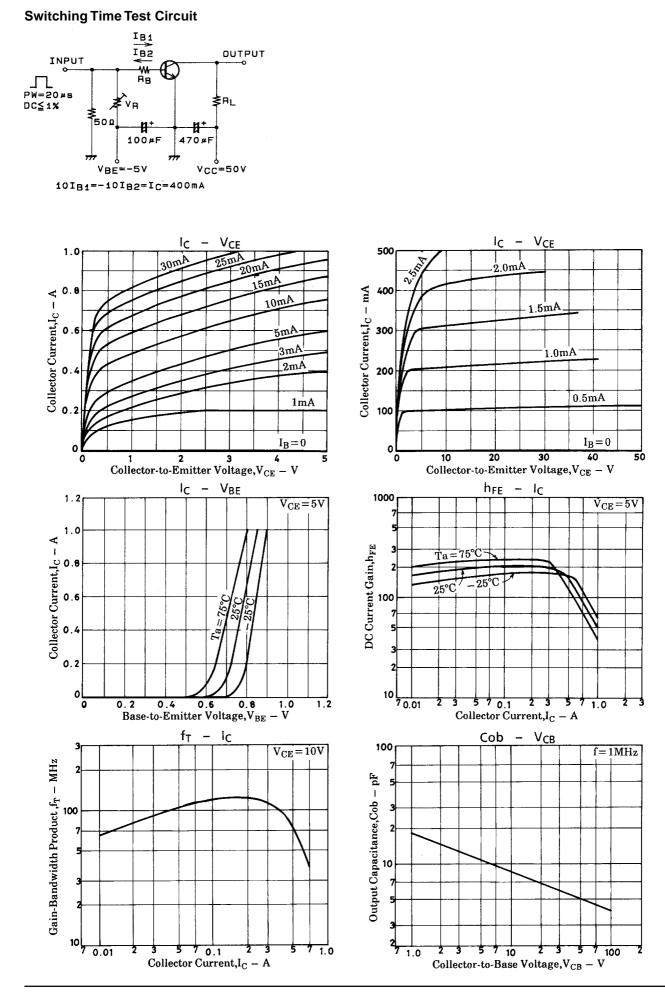
#### Parameter Symbol Conditions Ratings Unit Collector-to-Base Voltage V 120 VCBO 100 V Collector-to-Emitter Voltage VCEO Emitter-to-Base Voltage V VEBO 6 Collector Current IC 1 А Collector Current (Pulse) **ICP** 2 А Base Current $I_B$ 200 mΑ PC **Collector Dissipation** Mounted on ceramic board (250mm<sup>2</sup>×0.8mm) 1 unit 0.8 W **Total Dissipation** PΤ Mounted on ceramic board (250mm<sup>2</sup>×0.8mm) 1.1 W Junction Temperature Тj 150 °C Storage Temperature Tstg -55 to +150 °C

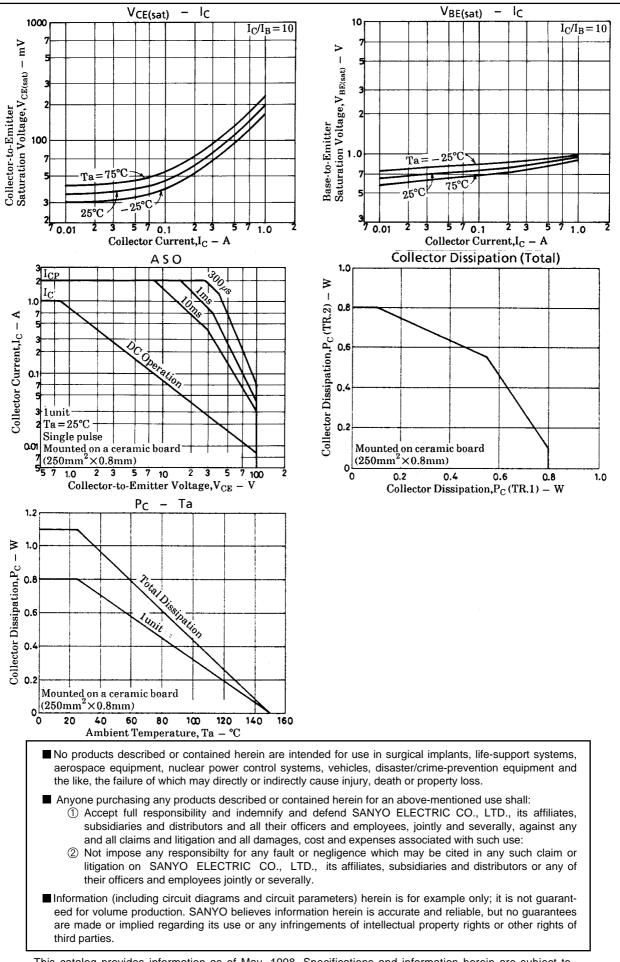
### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	ICBO	V <sub>CB</sub> =100V, I <sub>E</sub> =0			100	nA
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0			100	nA
DC Current Gain	hFE	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	140		400	
Gain-Bandwidth Product	fT	V <sub>CE</sub> =10V, I <sub>C</sub> =100mA		120		MHz
Output Capacitance	Cob	V <sub>CB</sub> =10V, f=1MHz		8.5		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =400mA, I <sub>B</sub> =40mA		100	400	mV
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =400mA, I <sub>B</sub> =40mA		0.85	1.2	V
C-B Breakdown Voltage	V <sub>(BR)</sub> CBO	I <sub>C</sub> =10µA, I <sub>E</sub> =0	120			V
C-E Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =1mA, R <sub>BE</sub> =∞	100			V
E-B Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	6			V
Turn-ON Time	ton	See specified Test Circuit		80		ns
Storage Time	tstg	See specified Test Circuit		850		ns
Fall Time	tf	See specified Test Circuit		50		ns

Marking:216

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This catalog provides information as of May, 1998. Specifications and information herein are subject to change without notice.