

No.2107A

2SA1497/2SC3860

PNP/NPN Epitaxial Planar Silicon Transistors

Switching Applications

(with Bias Resistance)

Applications

- Switching circuits, inverter circuits, interface circuits, driver circuits

Features

- On-chip bias resistance: $R_1=10k\ \Omega$
- Small-sized package: SPA

(): 2SA1497

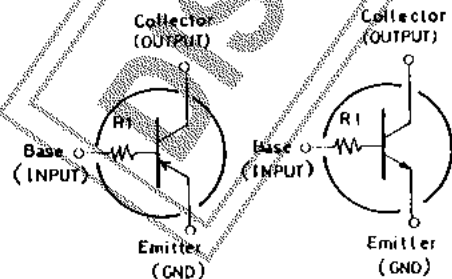
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

		unit
Collector to Base Voltage	V_{CBO}	(-)50 V
Collector to Emitter Voltage	V_{CEO}	(-)50 V
Emitter to Base Voltage	V_{EBO}	(-)5 V
Collector Current	I_C	(-)100 mA
Collector Current(Pulse)	I_{CP}	(-)200 mA
Collector Dissipation	P_C	300 mW
Junction Temperature	T_j	150 $^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150 $^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

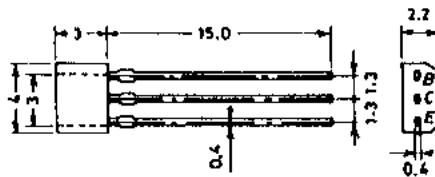
		min	typ	max	unit
Collector Cutoff Current	I_{CBO} $V_{CE}=(-)40V, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO} $V_{EB}=(-)5V, I_C=0$			(-)0.1	μA
DC Current Gain	h_{FE} $V_{CE}=(-)5V, I_C=(-)10\text{mA}$	100			
Gain-Bandwidth Product	f_T $V_{CE}=(-)10V, I_C=(-)5\text{mA}$		250		MHz
			(200)		MHz
Output Capacitance	c_{ob} $V_{CE}=(-)10V, f=1\text{MHz}$		3.7		pF
			(5.5)		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$ $I_C=(-)10\text{mA}, I_B=(-)0.5\text{mA}$	(-)0.1		(-)0.3	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$ $I_C=(-)10\mu\text{A}, I_E=0$		(-)50		V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$ $I_C=(-)100\mu\text{A}, R_{BE}=\infty$		(-)50		V
Input OFF Voltage	$V_I(off)$ $V_{CE}=(-)5V, I_C=(-)100\mu\text{A}$	(-)0.4	(-)0.55	(-)0.8	V
Input ON Voltage	$V_I(on)$ $V_{CE}=(-)0.2V, I_C=(-)10\text{mA}$	(-)0.7	(-)1.2	(-)3.0	V
Input Resistance	R_I	7.0	10	13	k Ω

Electrical Connection



2SA1497(PNP) 2SC3860(NPN)

Case Outline 2033
(unit:mm)



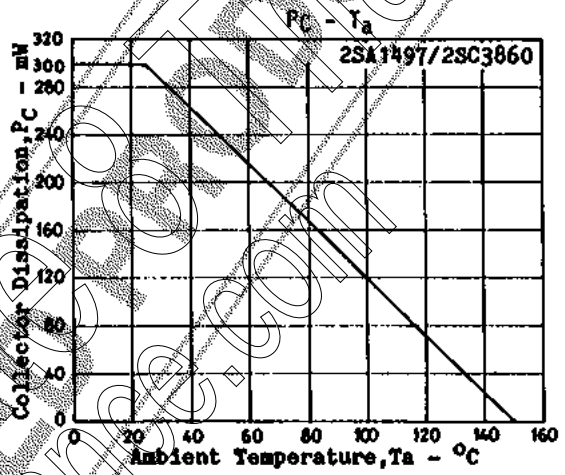
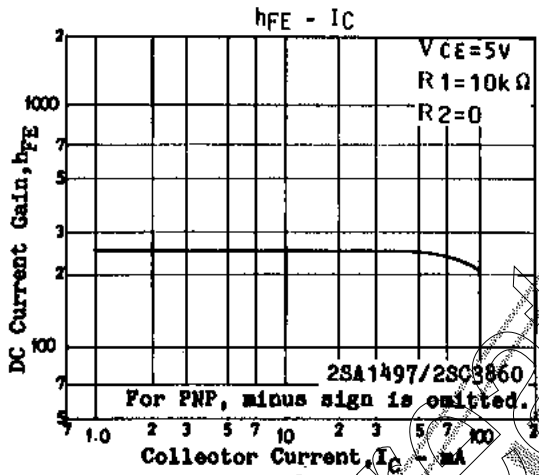
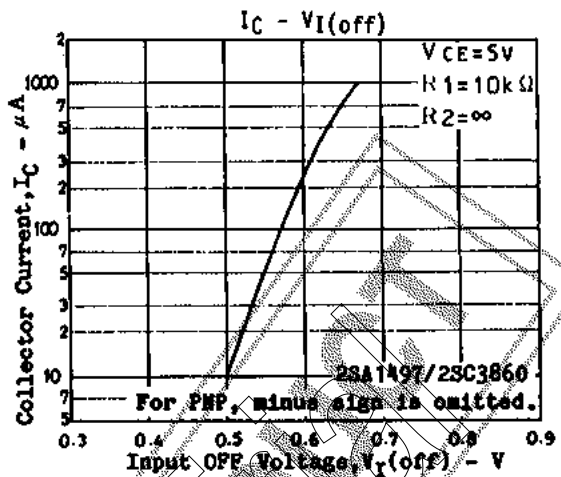
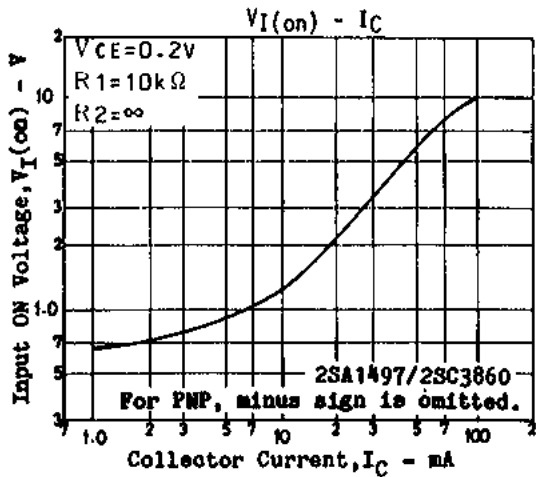
B: Base
C: Collector
E: Emitter

SANYO: SPA

Specifications and information herein are subject to change without notice.

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