

**2SA1496,
2SC3859**



2018A

T-37-13
T-35-11
PNP/NPN Epitaxial Planar
Silicon Transistors

Switching Applications (with Bias Resistance R1=10kΩ)

©2106A

Applications

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

Features

- On-chip bias resistance: R₁=10kohms
- Small-sized package: CP

(): 2SA1496

Absolute Maximum Ratings at Ta=25°C

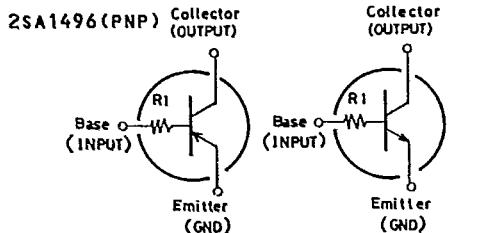
			unit
Collector to Base voltage	V _{CB0}	(-)50	V
Collector to Emitter Voltage	V _{CEO}	(-)50	V
Emitter to Base Voltage	V _{EBO}	(-)5	V
Collector Current	I _C	(-)100	mA
Peak Collector Current	i _{cp}	(-)200	mA
Collector Dissipation	P _C	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

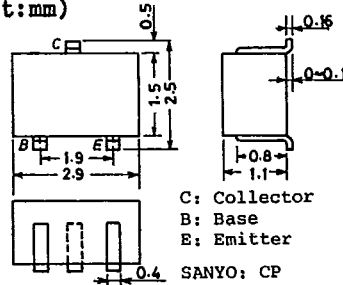
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =(-)40V, I _E =0			(-)0.1	uA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)5V, I _C =0			(-)0.1	uA
DC Current Gain	h _{FE}	V _{CE} =(-)5V, I _C =(-)10mA	100			
Gain-Bandwidth Product	f _T	V _{CE} =(-)10V, I _C =(-)5mA		250		MHz
				(200)		MHz
Output Capacitance	c _{ob}	V _{CB} =(-)10V, f=1MHz		3.5		pF
				(5.3)		pF
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)10mA, I _B =(-)0.5mA		(-)0.1	(-)0.3	V
Collector to Base Breakdown Voltage	V _{(BR)CB0}	I _C =(-)10uA, I _E =0		(-)50		V
Collector to Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)100uA, R _{BE} =∞		(-)50		V
Input OFF Voltage	V _{I(off)}	V _{CE} =(-)5V, I _C =100uA		(-)0.4	(-)0.55	(-)0.8 V
Input ON Voltage	V _{I(on)}	V _{CE} =(-)0.2V, I _C =(-)10mA		(-)0.7	(-)1.2	(-)3.0 V
Input Resistance	R ₁		7.0	10	13	kohm

Marking: 2SA1496: GL, 2SC3859: PY

Electrical Connection



Case Outline 2018A (unit:mm)

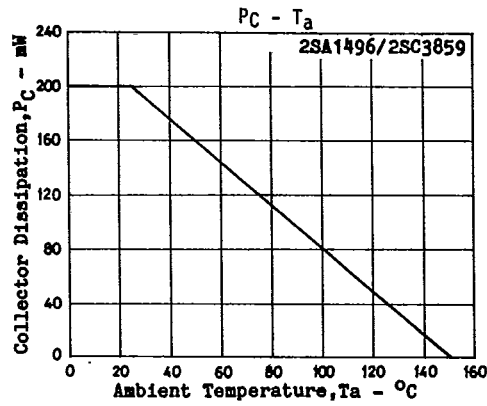
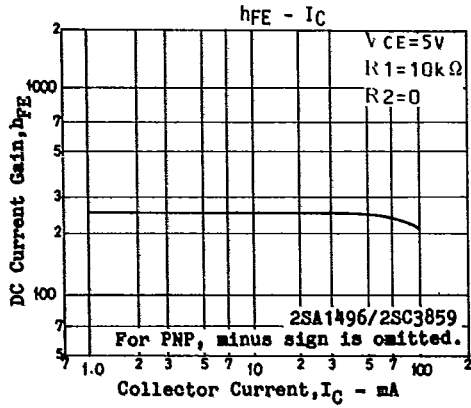
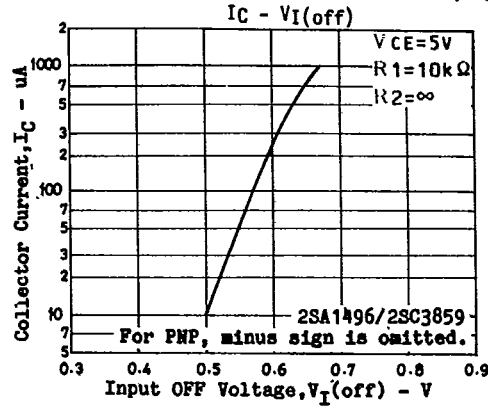
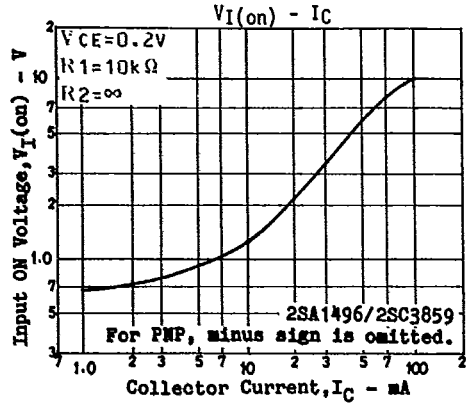


3317KI/6256AT, TS No.2106-1/2

2SA1496/2SC3859

T-37-13

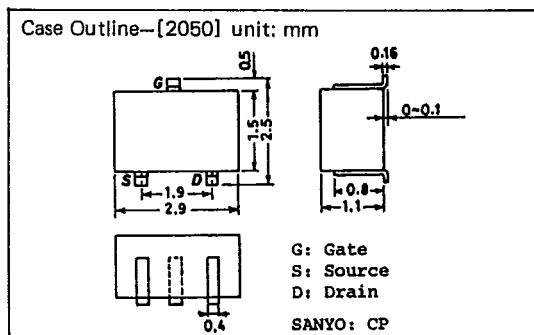
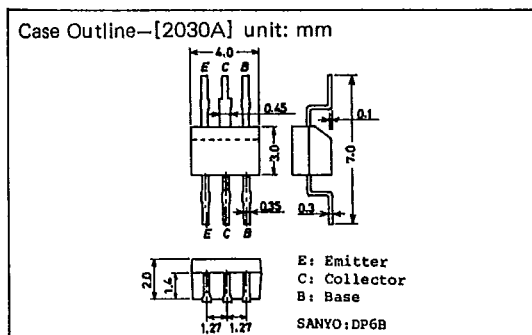
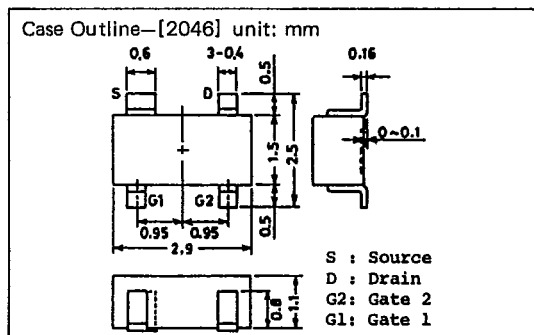
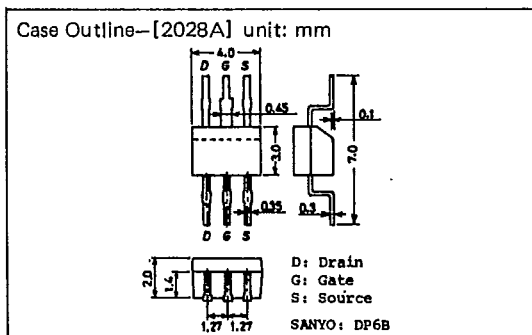
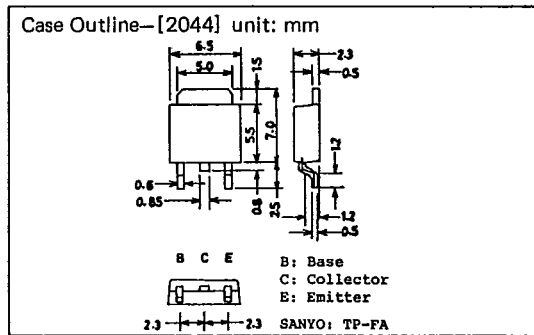
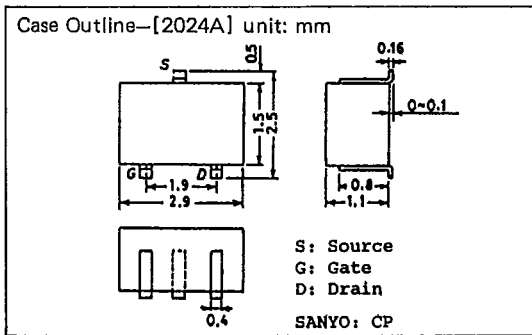
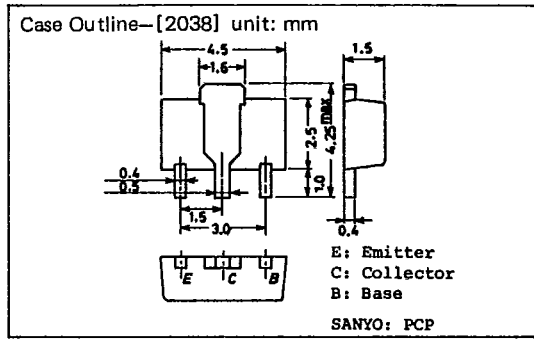
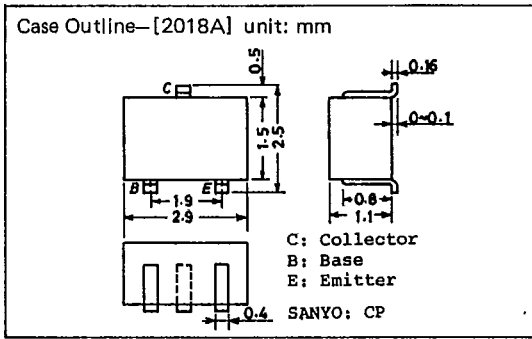
T-35-11



T-91-20

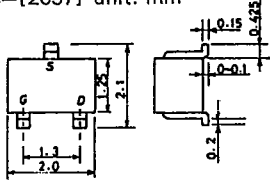
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- All of Sanyo surface mount transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.



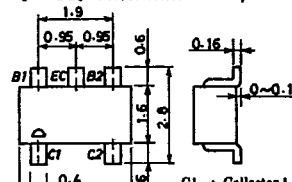
T-91-20

Case Outline—[2057] unit: mm



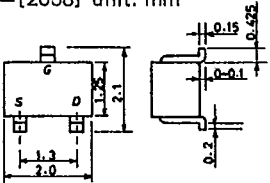
S: Source
G: Gate
D: Drain
SANYO: MCP

Case Outline—[2066] unit: mm



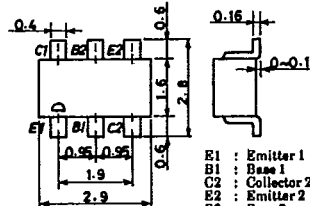
C1 : Collector 1
C2 : Collector 2
B2 : Base 2
EC : Emitter Common
B1 : Base 1
SANYO : CP6

Case Outline—[2058] unit: mm



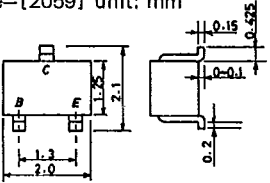
G: Gate
S: Source
D: Drain
SANYO: MCP

Case Outline—[2067] unit: mm



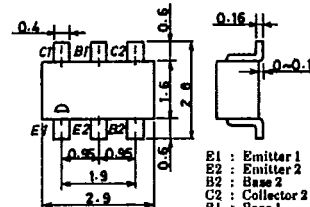
E1 : Emitter 1
B1 : Base 1
C2 : Collector 2
E2 : Emitter 2
B2 : Base 2
C1 : Collector 1
SANYO : CP6

Case Outline—[2059] unit: mm



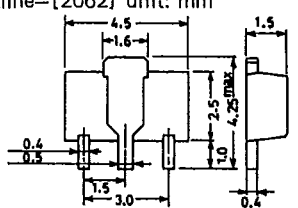
B: Base
C: Collector
E: Emitter
SANYO: MCP

Case Outline—[2068] unit: mm



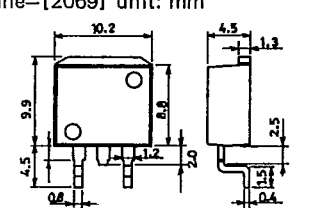
B1 : Emitter 1
E2 : Emitter 2
B2 : Base 2
C2 : Collector 2
B1 : Base 1
C1 : Collector 1
SANYO : CP6

Case Outline—[2062] unit: mm



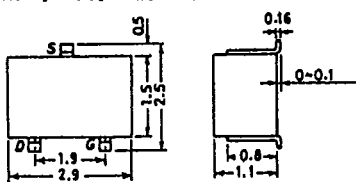
S: Source
D: Drain
G: Gate
SANYO: PCP

Case Outline—[2069] unit: mm



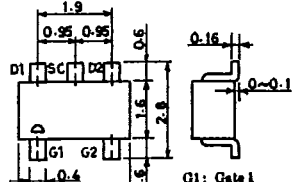
B: Base
C: Collector
E: Emitter
SANYO: SMP

Case Outline—[2065] unit: mm



S: Source
D: Drain
G: Gate
SANYO: CP

Case Outline—[2070] unit: mm



G1 : Gate 1
G2 : Gate 2
D2 : Drain 2
SC : Source Common
D1 : Drain 1
SANYO : CP6

T-9120

