

2SA1179, 2SC2812

T-29-15



2018A

PNP/NPN Epitaxial Planar
Silicon Transistors

Low-Frequency General-Purpose Amp Applications

©3218

Features

- Small-sized package permitting the 2SA1179/2SC2812-applied sets to be made small and slim
- High breakdown voltage

() : 2SA1179

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V _{CB0}	(-)55	V
Collector to Emitter Voltage	V _{CE0}	(-)50	V
Emitter to Base Voltage	V _{EBO}	(-)5	V
Collector Current	I _C	(-)150	mA
Peak Collector Current	i _{cp}	(-)300	mA
Base Current	I _B	(-)30	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 _{CBO}	V _{CB} =(-)35V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(-)0.1	μA
DC Current Gain	h _{FE}	V _{CE} =(-)6V, I _C =(-)1mA	90*		600*	
Gain-Bandwidth Product	f _T	2SC2812: V _{CE} =6V, I _C =1mA 2SA1179: V _{CE} =-6V, I _C =-10mA		100 (180)		MHz MHz
Output Capacitance	c _{ob}	V _{CB} =(-)6V, f=1MHz		(4.0)3.0		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C =(-)50mA, I _B =(-)5mA		0.1 (-)0.5 (-0.15)		V
B-E Saturation Voltage	V _{BE(sat)}	I _C =(-)50mA, I _B =(-)5mA			(-)1.0	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0	(-)55			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} =∞	(-)50			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0	(-)5			V

* : The 2SA1179/2SC2812 are classified by 1mA h_{FE} as follows :

90	4	180	135	5	270	200	6	400	300	7	600
----	---	-----	-----	---	-----	-----	---	-----	-----	---	-----

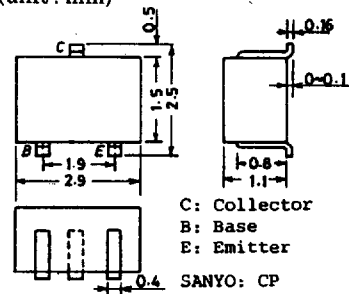
Marking : 2SA1179 : M

2SC2812 : L

h_{FE} rank : 4,5,6,7

Case Outline 2018A

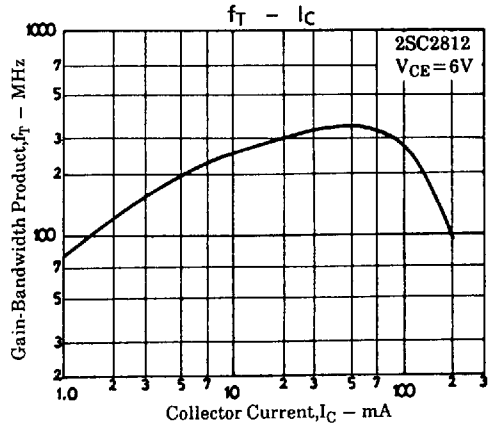
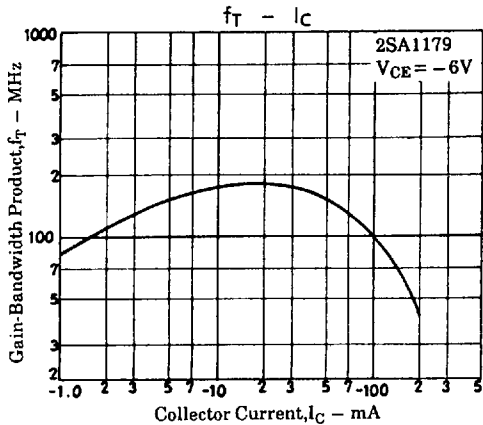
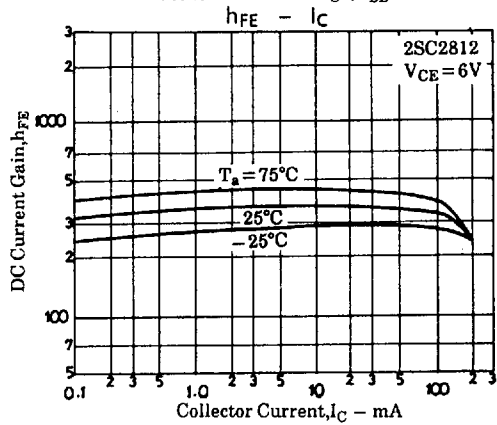
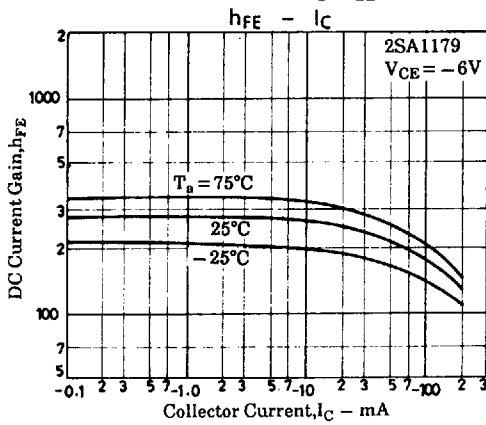
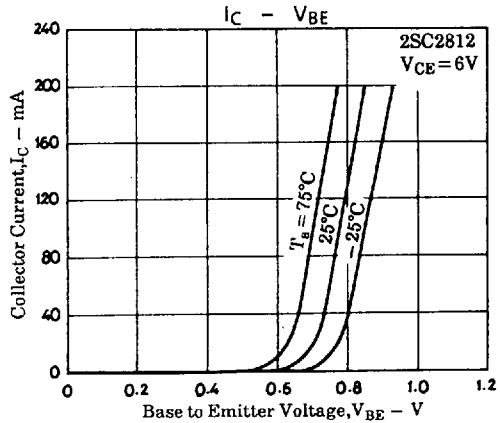
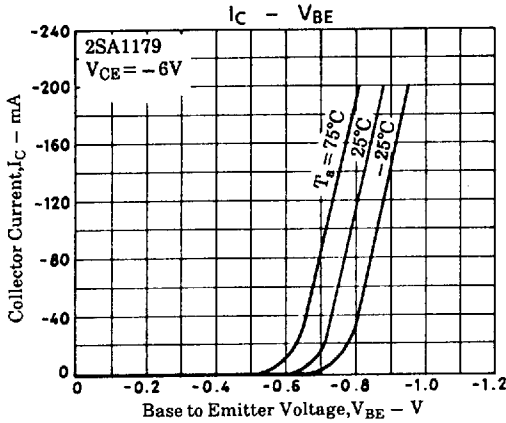
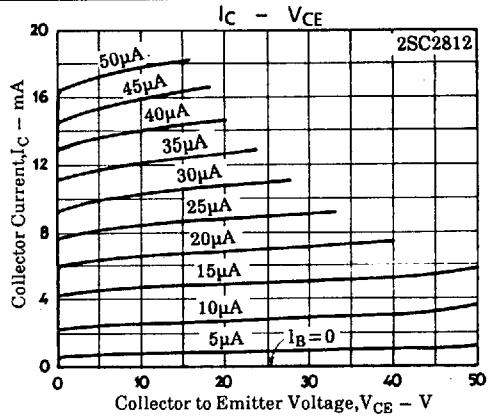
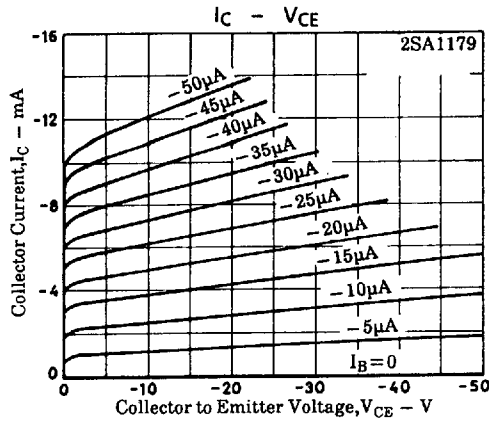
(unit : mm)



7139MO, TS No.3218-1/4

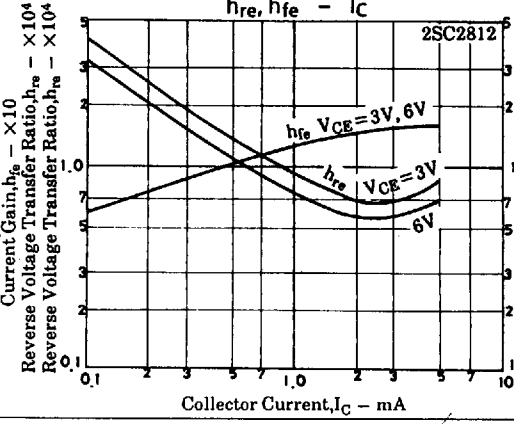
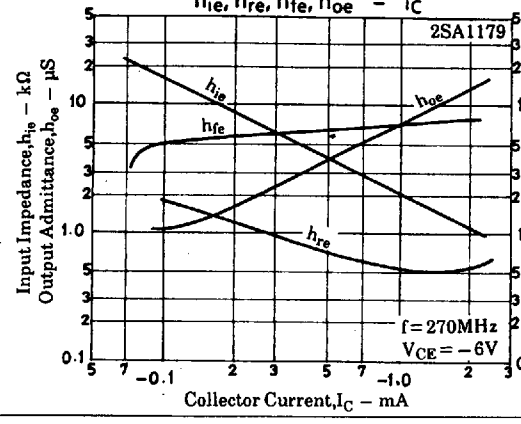
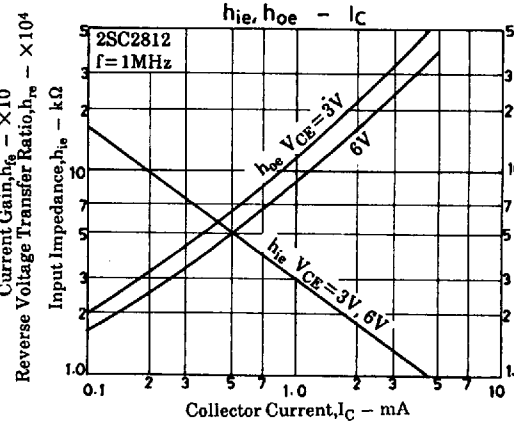
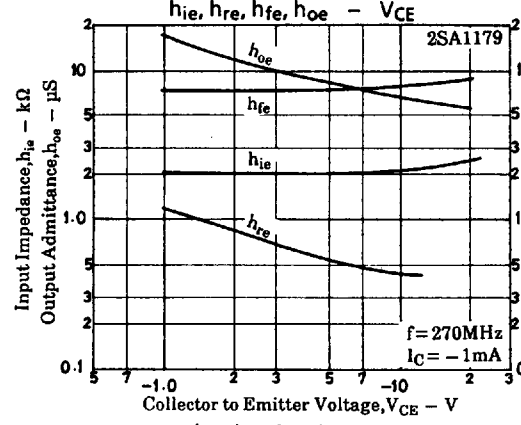
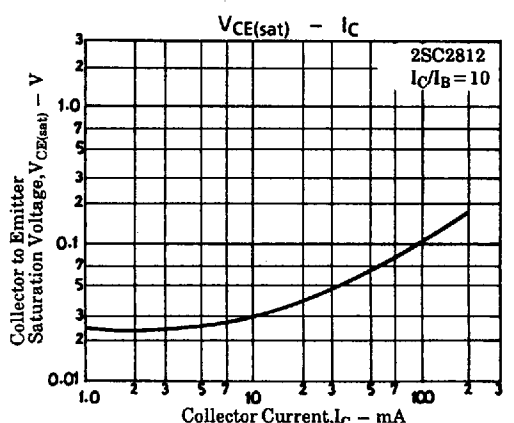
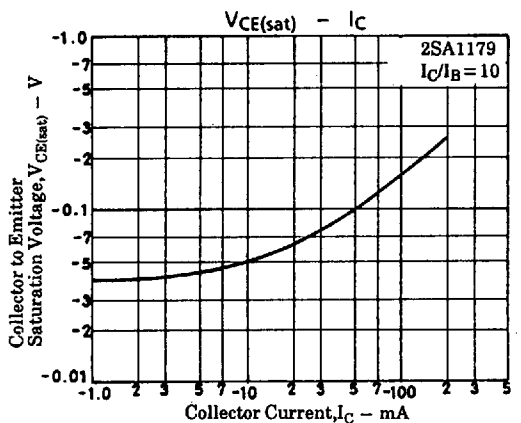
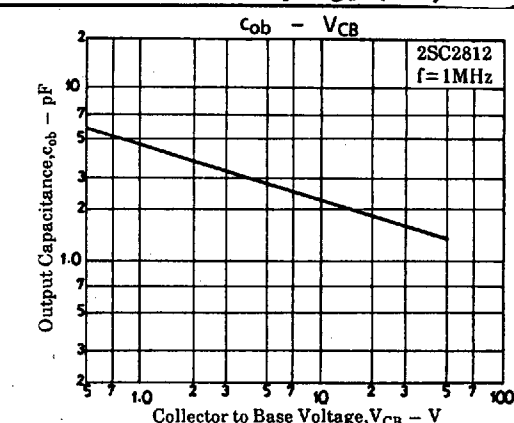
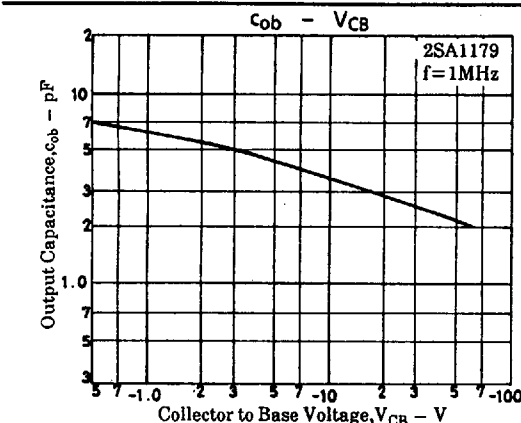
2SA1179/2SC2812

T-29-15



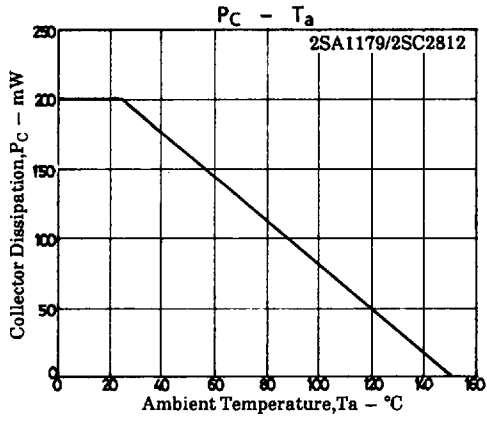
2SA1179/2SC2812

T-29-15



2SA1179/2SC2812

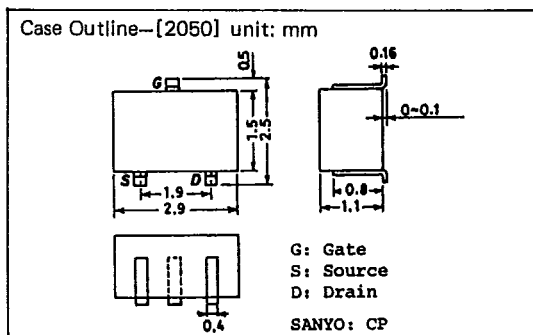
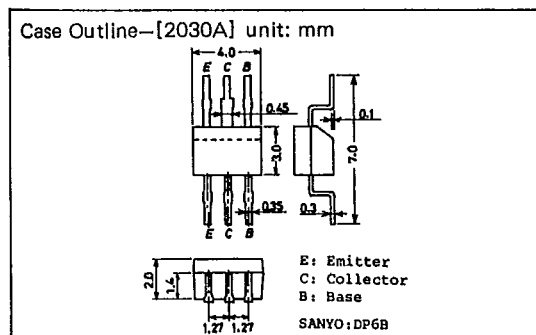
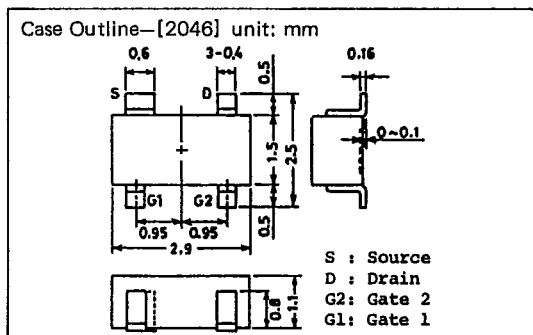
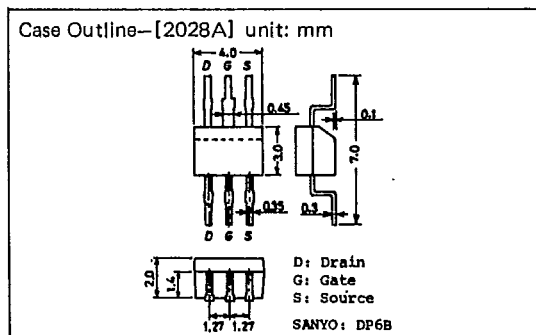
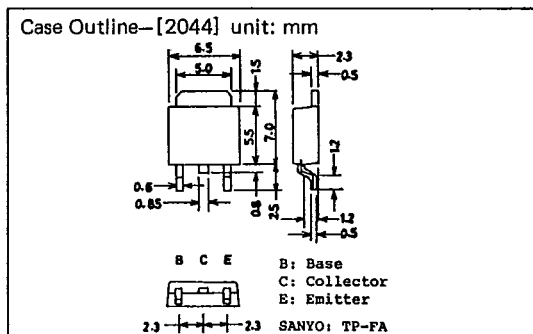
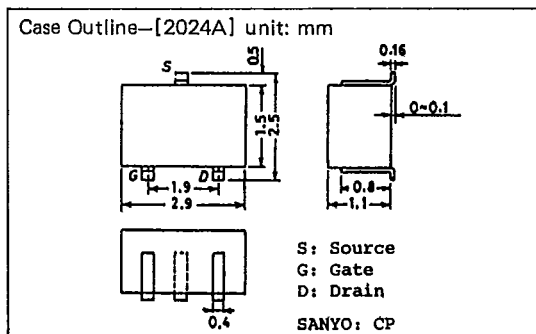
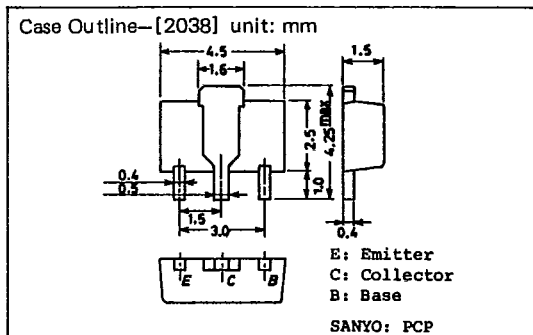
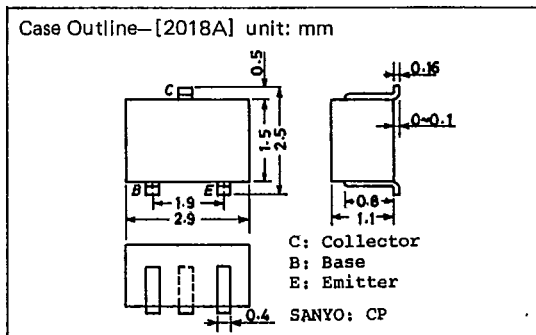
T-29-15



T-91-20

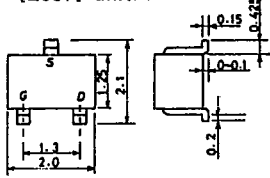
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- 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.



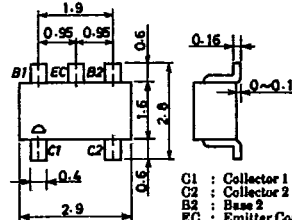
T-91-20

Case Outline—[2057] unit: mm



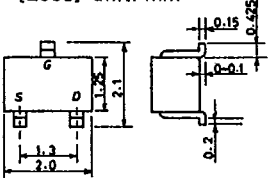
S: Source
G: Gate
D: Drain
SANYO: MCP

Case Outline—[2066] unit: mm



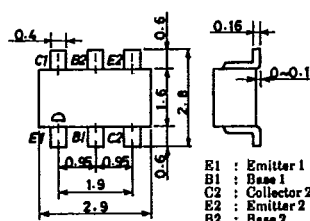
C1 : Collector 1
C2 : Collector 2
B2 : Base 2
EC : Emitter Common
B1 : Base 1
SANYO : CP6

Case Outline—[2058] unit: mm



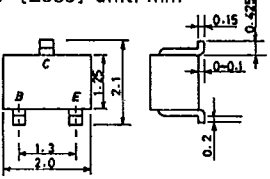
G: Gate
S: Source
D: Drain
SANYO: MCP

Case Outline—[2067] unit: mm



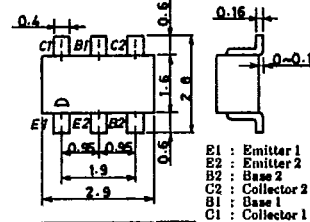
E1 : Emitter 1
B1 : Base 1
C2 : Collector 2
E2 : Emitter 2
B2 : Base 2
C1 : Collector 1
SANYO : CP6

Case Outline—[2059] unit: mm



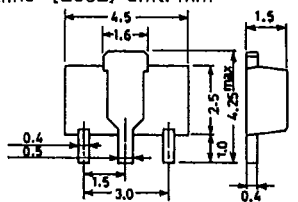
B: Base
C: Collector
E: Emitter
SANYO: MCP

Case Outline—[2068] unit: mm



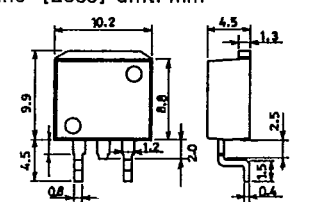
E1 : Emitter 1
E2 : Emitter 2
B2 : Base 2
C2 : Collector 2
B1 : Base 1
C1 : Collector 1
SANYO : CP6

Case Outline—[2062] unit: mm



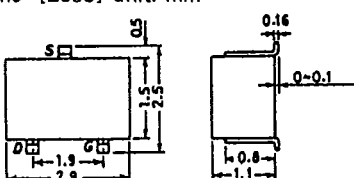
S: Source
D: Drain
G: Gate
SANYO: PCP

Case Outline—[2069] unit: mm



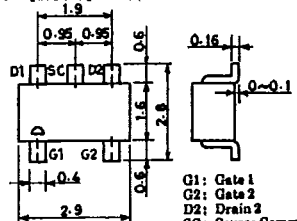
B: Base
C: Collector
E: Emitter
SANYO: SMP

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

