

SANYO

No.199J

2SB544/2SD400

PNP/NPN Epitaxial Planar Silicon Transistors

**Low-Frequency Power Amp,
Electronic Governor Applications**

(): 2SB544

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

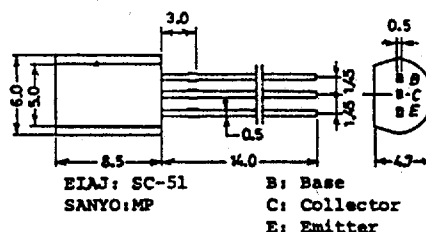
			unit
Collector to Base Voltage	V_{CBO}	(-)25	V
Collector to Emitter Voltage	V_{CEO}	(-)25	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)1	A
Collector Current(Pulse)	I_{CP}	(-)2	A
Collector Dissipation	P_C	900	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)20\text{V}, I_E = 0$			(-)1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)2\text{V}, I_C = (-)50\text{mA}$	60%		560%	
	$h_{FE}(2)$	$V_{CE} = (-)2\text{V}, I_C = (-)1\text{A}$	30			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)10\text{V}, I_C = (-)50\text{mA}$		180		MHz
Output Capacitance	c_{ob}	$V_{CB} = (-)10\text{V}, f = 1\text{MHz}$		(25)		pF
				15		
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)500\text{mA}, I_B = (-)50\text{mA}$	(-0.15)	(-0.7)		V
			0.1	0.3		
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)500\text{mA}, I_B = (-)50\text{mA}$	(-)0.85	(-)1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu\text{A}, I_E = 0$	(-)25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1\text{mA}, R_{BE} = \infty$	(-)25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)10\mu\text{A}, I_C = 0$	(-)5			V

*: The 2SB544/2SD400 are classified by 50mA h_{FE} as follows :

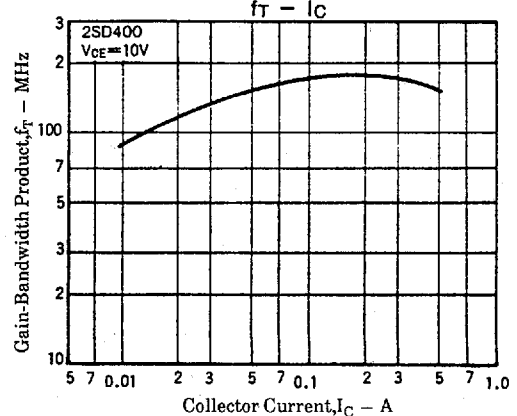
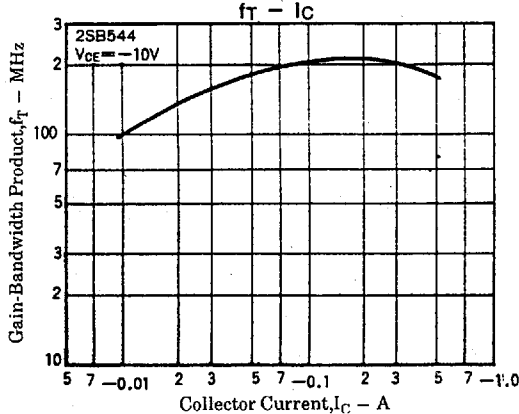
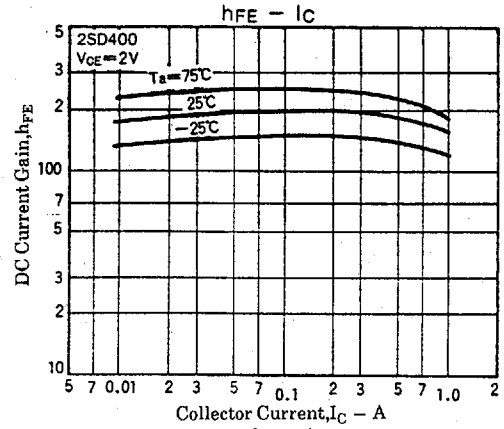
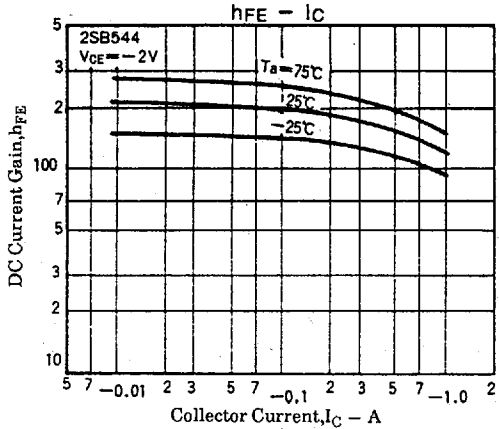
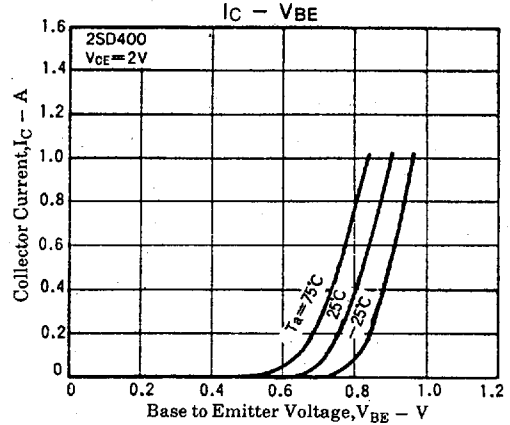
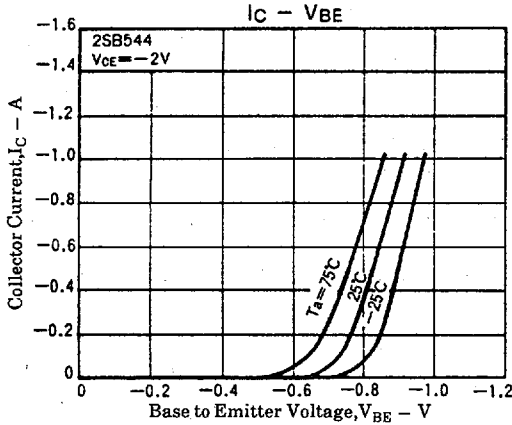
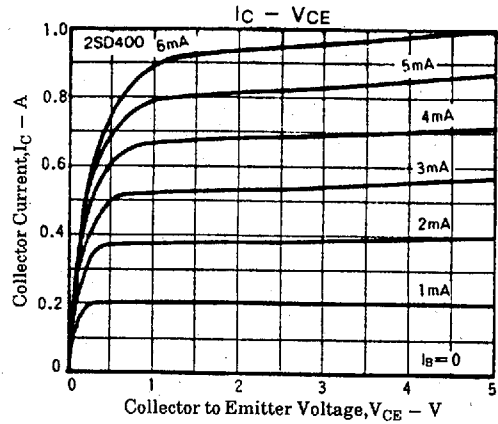
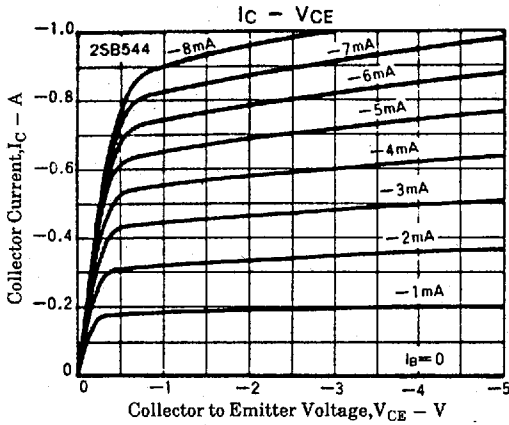
60 D 120	100 E 200	160 F 320	280 G 560
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Case Outline 2006A
(unit: mm)


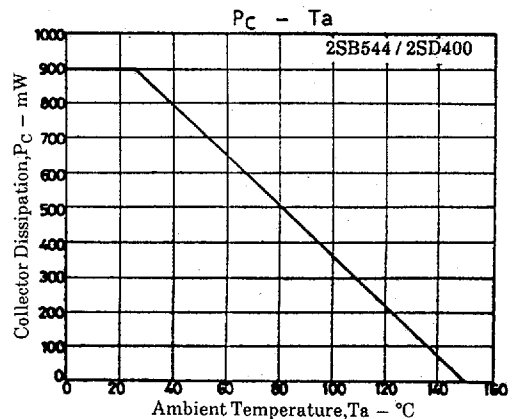
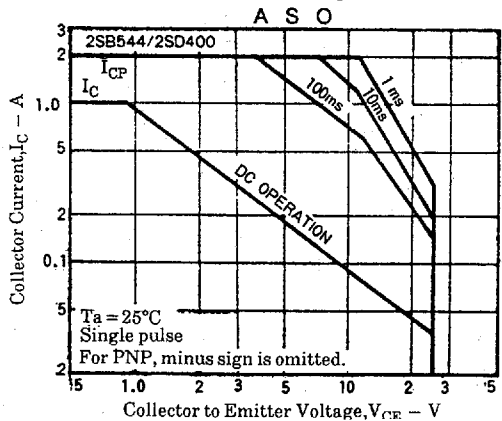
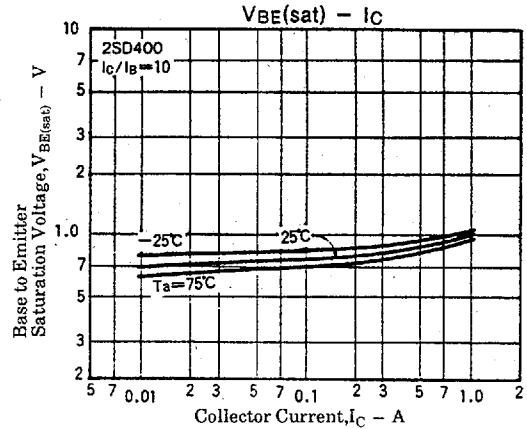
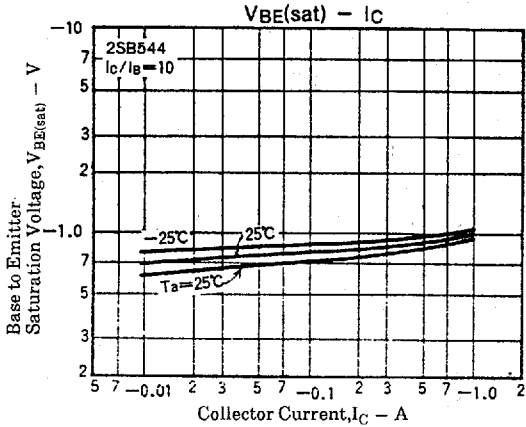
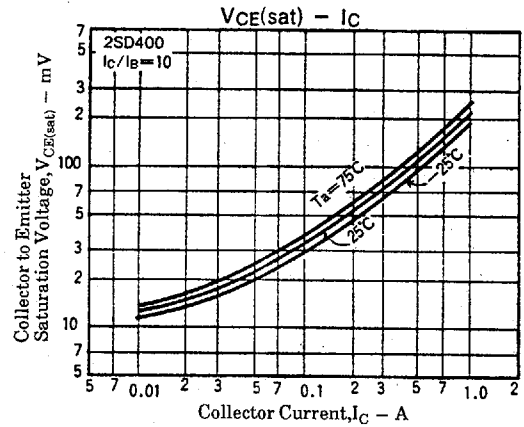
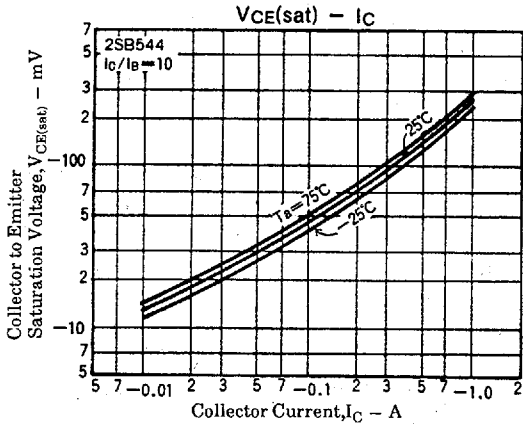
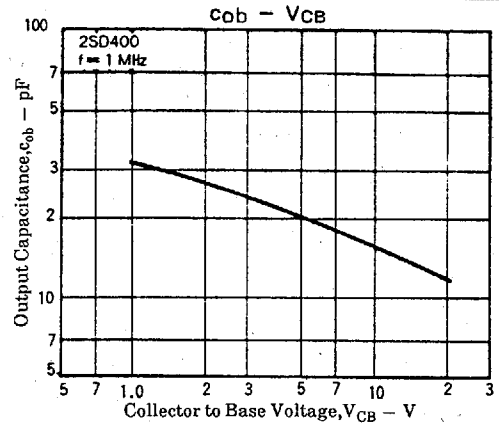
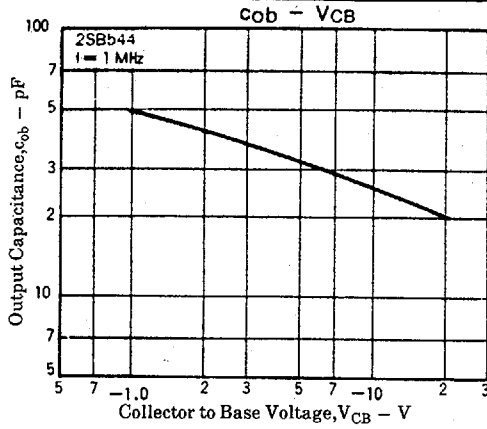
Specifications and information herein are subject to change without notice.

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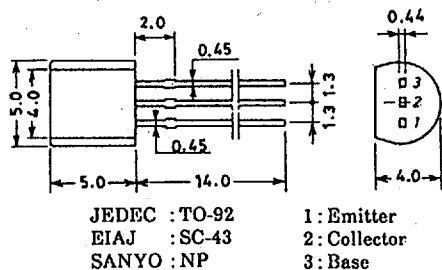
2SB544/2SD400



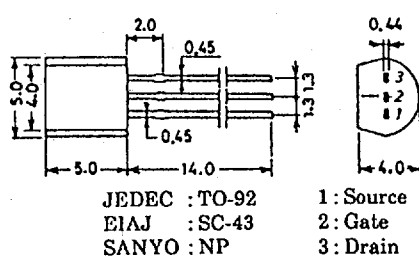
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- All of Sanyo lead formed small signal 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.

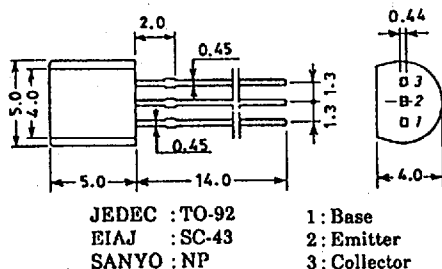
Case Outline 2003A/2003B (unit : mm)



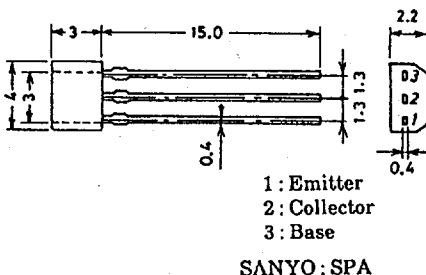
Case Outline 2019A/2019B (unit : mm)



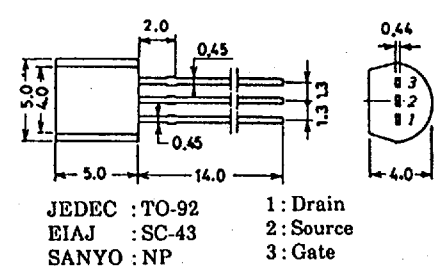
Case Outline 2004A (unit : mm)



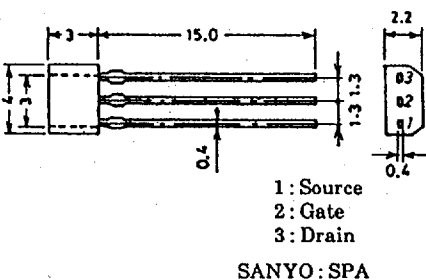
Case Outline 2033 (unit : mm)



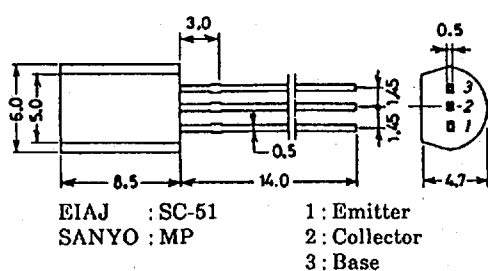
Case Outline 2005A (unit : mm)



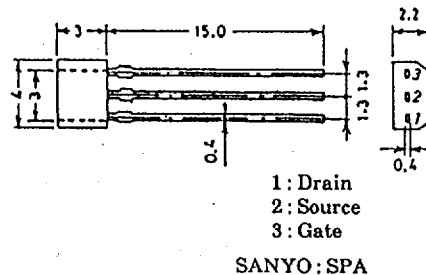
Case Outline 2034/2034A (unit : mm)



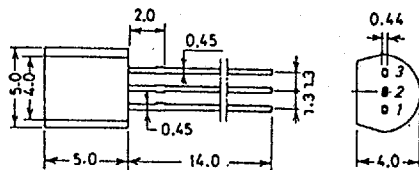
Case Outline 2006A (unit : mm)



Case Outline 2040 (unit : mm)



Case Outline 2061 (unit : mm)



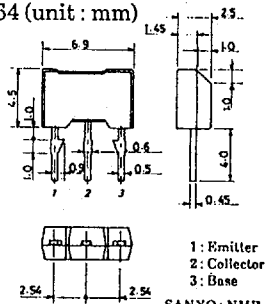
JEDEC : TO-92

EIAJ : SC-43

SANYO : NP

- 1: Emitter
- 2: Base
- 3: Collector

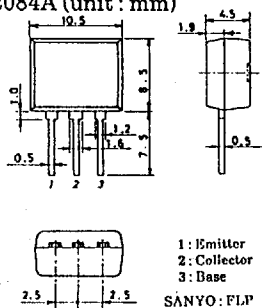
Case Outline 2064 (unit : mm)



SANYO : NMP

- 1: Emitter
- 2: Collector
- 3: Base

Case Outline 2084A (unit : mm)



SANYO : FLIP

- 1: Emitter
- 2: Collector
- 3: Base