

SANYO

No.572D

2SA1016,1016K/2SC2362,2362K

PNP/NPN Epitaxial Planar Silicon Transistors

**High-Voltage Low-Noise Amp
Applications**

(): 2SA1016,1016K

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

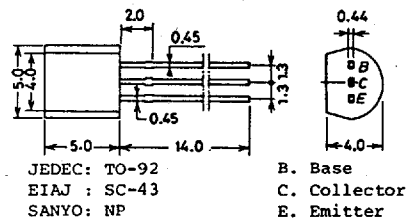
	2SA1016,2SC2362	2SA1016K,2SC2362K	unit
Collector to Base Voltage	V_{CBO}	(-)120	V
Collector to Emitter Voltage	V_{CEO}	(-)100	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)50	mA
Collector Current(Pulse)	I_{CP}	(-)100	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

		min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)80\text{V}, I_E=0$	(-)1.0		μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$	(-)1.0		μA
DC Current Gain	h_{FE}	$V_{CE}=(-)6\text{V}, I_C=(-)1\text{mA}$	160*	960*	
Gain-Bandwidth Product	f_T	$V_{CE}=(-)6\text{V}, I_C=(-)1\text{mA}$	(110) 130		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10\text{V}, f=1\text{MHz}$	(2.2) 1.8		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)10\text{mA}, I_B=(-)1\text{mA}$	(-)0.5		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)120		V
		[A1016, C2362]			
		$I_C=(-)10\mu\text{A}, I_E=0$	(-)150		V
		[A1016K, C2362K]			
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)100		V
		[A1016, C2362]			
		$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)120		V
		[A1016K, C2362K]			
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu\text{A}, I_C=0$	(-)5		V
Noise Level	$V_{NO(ave)}$	$V_{CC}=30\text{V}, I_C=1\text{mA}, R_g=56\text{k}\Omega$	35		mV
		$V_G=77\text{dB/1kHz}$			
Noise Peak Level	$V_{NO(peak)}$	" " "	200		mV

* The 2SA1016,K/ 2SC2362,K are classified by 1mA h_{FE} as follows :

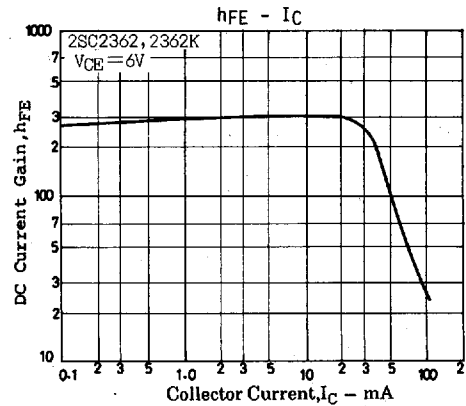
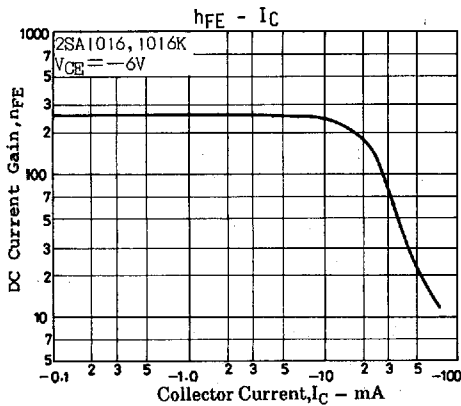
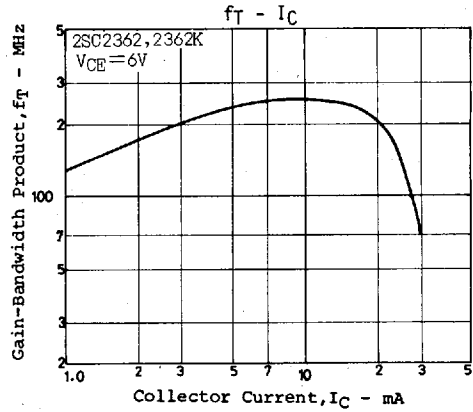
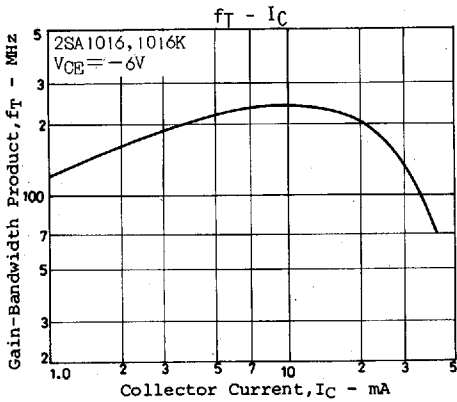
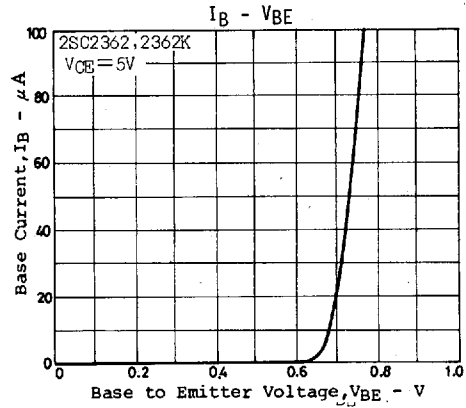
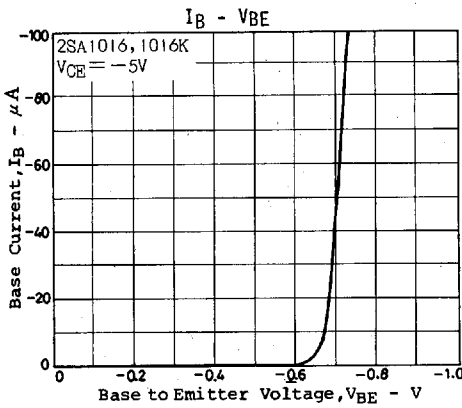
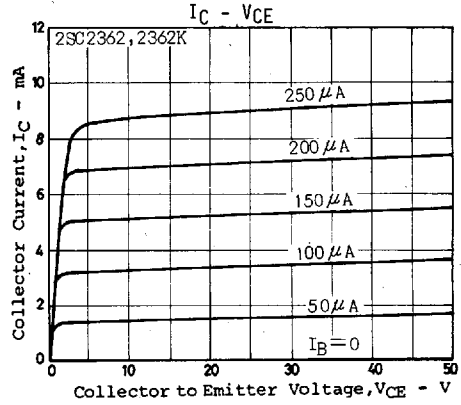
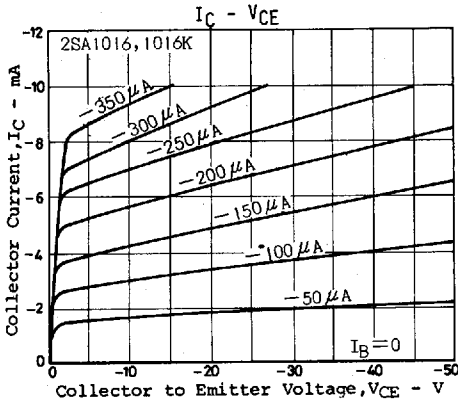
160	F	320	280	G	560	480	H	960
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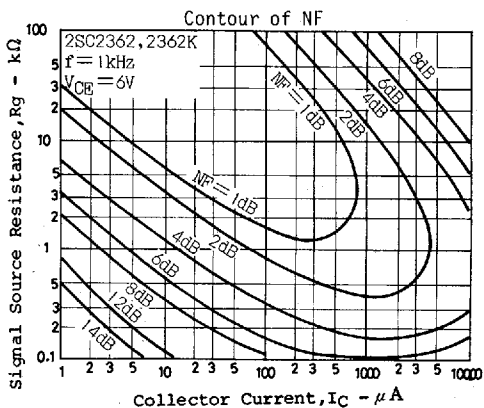
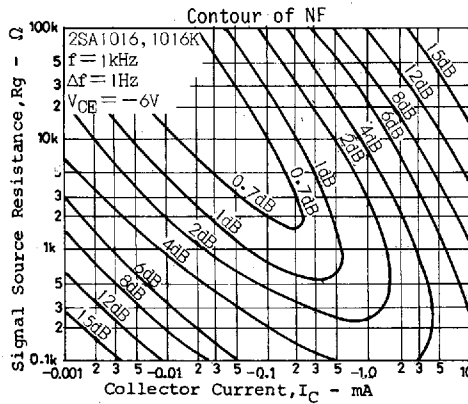
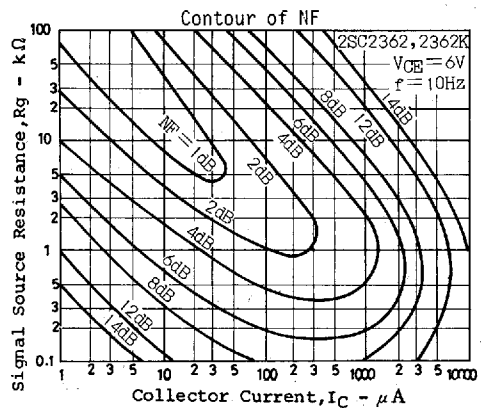
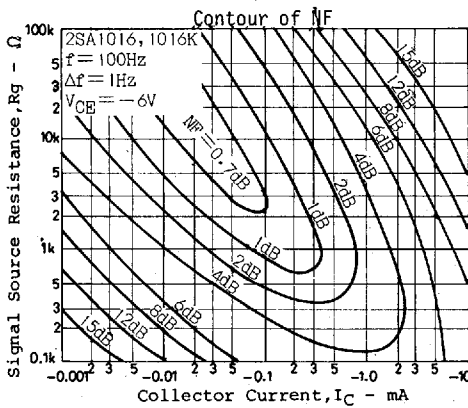
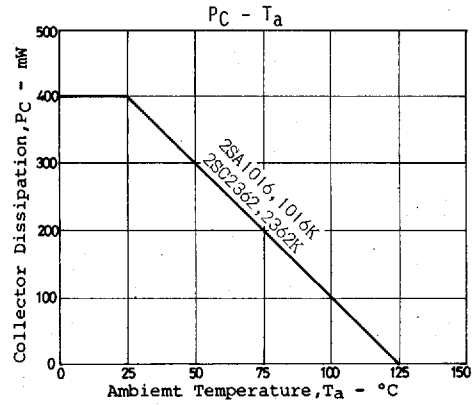
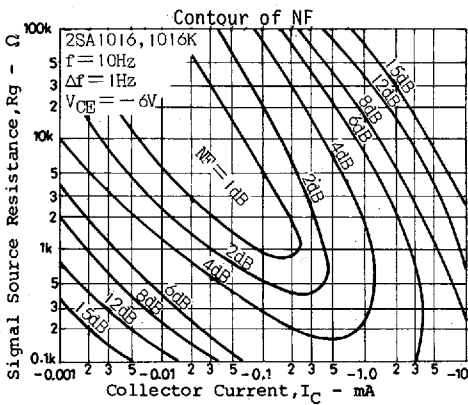
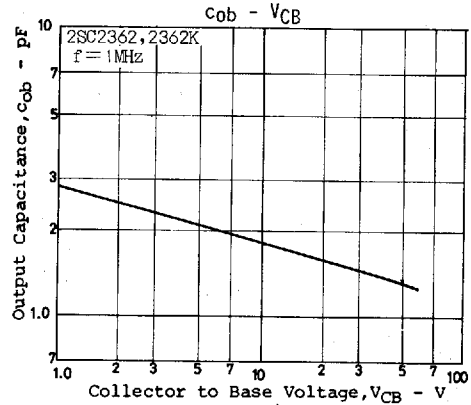
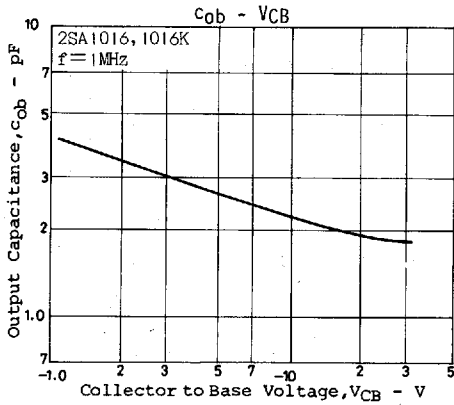
Case Outline 2003A
(unit:mm)

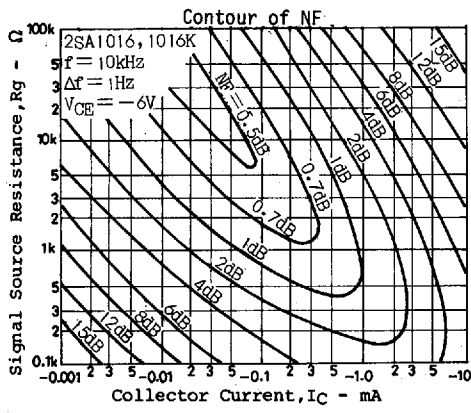
Specifications and information herein are subject to change without notice.

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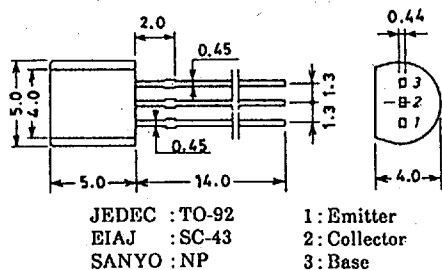




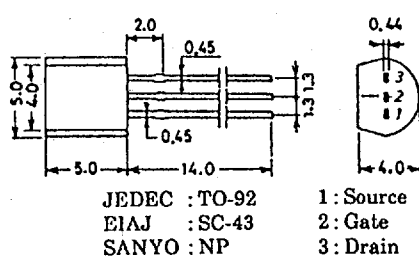
CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

- 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.

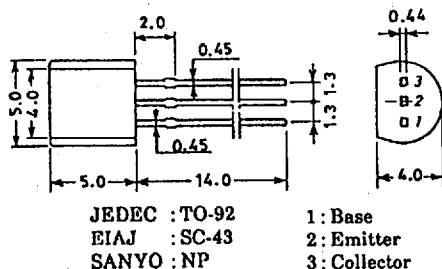
Case Outline 2003A/2003B (unit : mm)



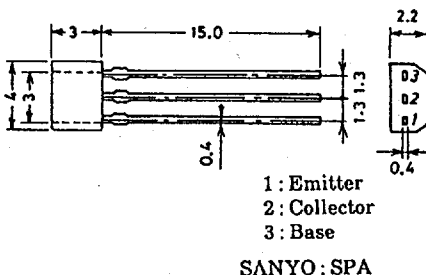
Case Outline 2019A/2019B (unit : mm)



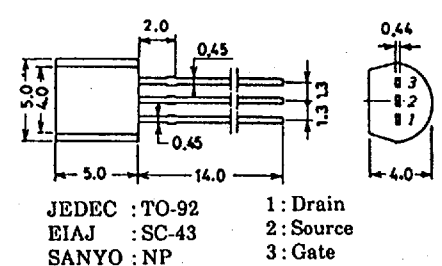
Case Outline 2004A (unit : mm)



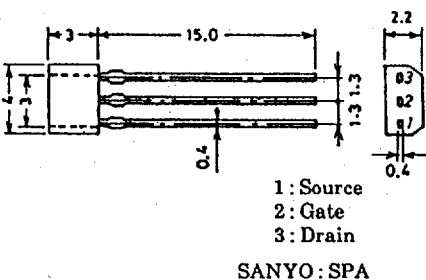
Case Outline 2033 (unit : mm)



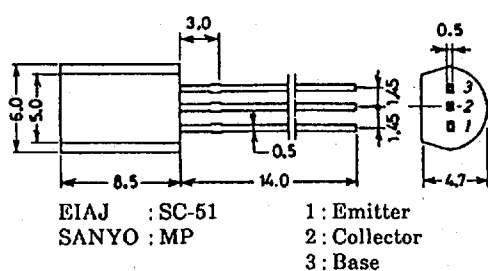
Case Outline 2005A (unit : mm)



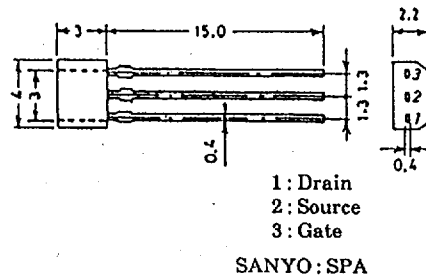
Case Outline 2034/2034A (unit : mm)



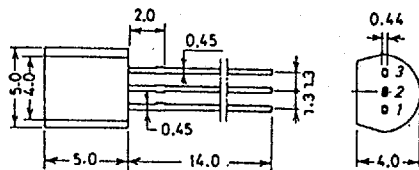
Case Outline 2006A (unit : mm)



Case Outline 2040 (unit : mm)



Case Outline 2061 (unit : mm)



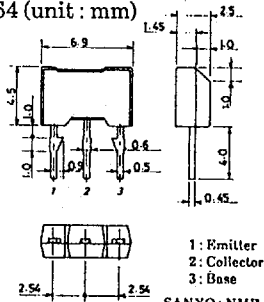
JEDEC : TO-92

EIAJ : SC-43

SANYO : NP

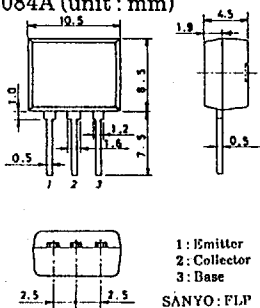
- 1: Emitter
- 2: Base
- 3: Collector

Case Outline 2064 (unit : mm)



SANYO : NMP

Case Outline 2084A (unit : mm)



SANYO : FLIP