

	No.326H	2SB560/2SD438
		PNP/NPN Epitaxial Planar Silicon Transistors
		Low-Frequency Power Amp Applications

The 2SB560/2SD438 are epitaxial planar transistors for complementary push-pull pair having high reverse voltage and low saturation voltage, and suitable universal AF power amplifier use.

():2SB560

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V_{CB0}	(-)100	V
Collector to Emitter Voltage	V_{CE0}	(-)80	V
Emitter to Base Voltage	V_{EB0}	(-)5	V
Collector Current	I_C	(-)0.7	A
Collector Current(Pulse)	I_{CP}	(-)1.0	A
Collector Dissipation	P_C	900	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

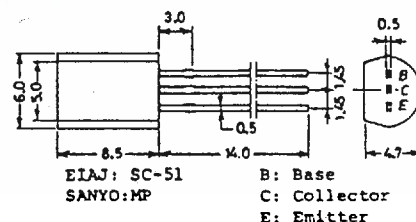
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=(-)20V, I_E=0$			(-)1.0	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=(-)4V, I_C=0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)5V, I_C=(-)50mA$	60*		560*	
	$h_{FE}(2)$	$V_{CE}=(-)5V, I_C=(-)0.5A$	30			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)50mA$		100		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(15)		pF
				10		pF
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A$	(-)100			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	(-)80			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-)5			V
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-0.3)(-0.8)		V
				0.2 0.6		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$	(-)0.85(-)1.2			V

* The 2SB560/2SD438 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)

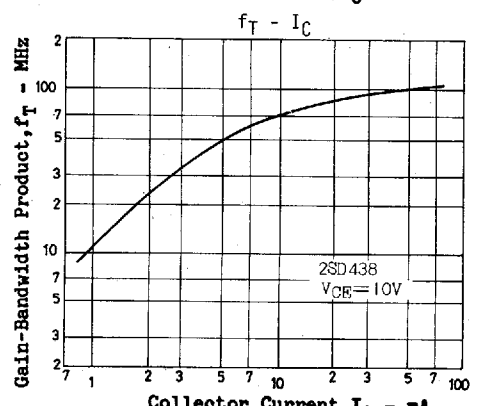
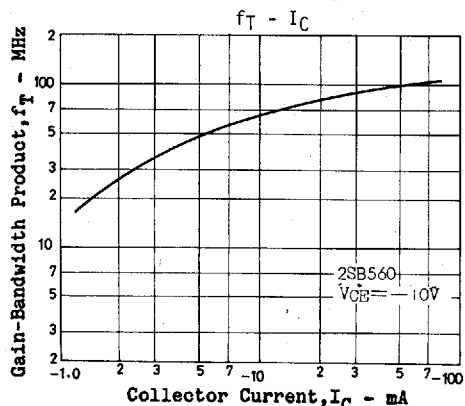
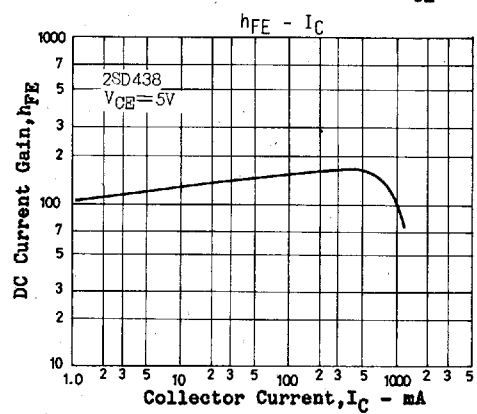
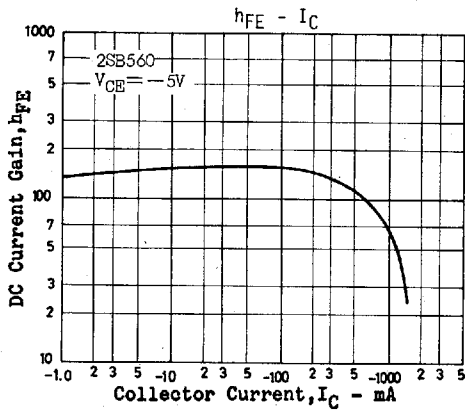
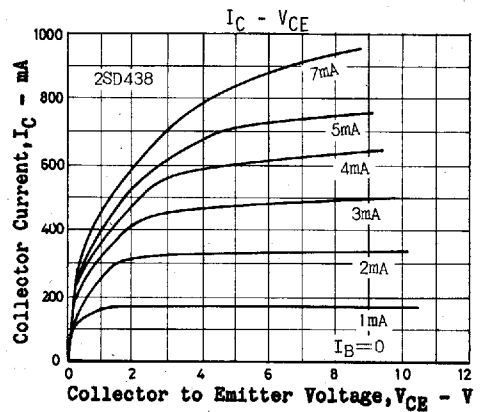
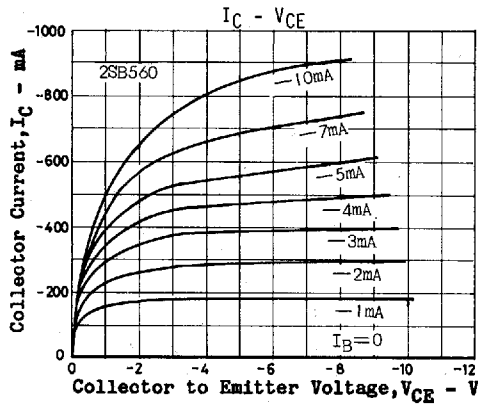
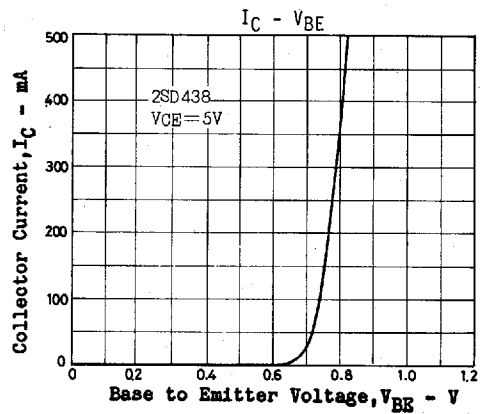
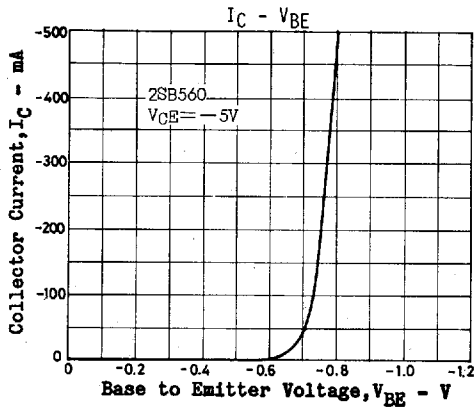


Specifications and information herein are subject to change without notice.

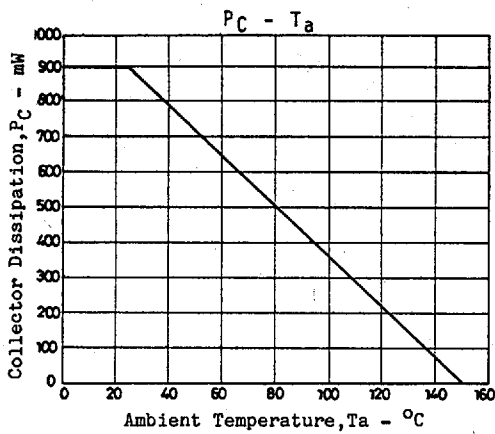
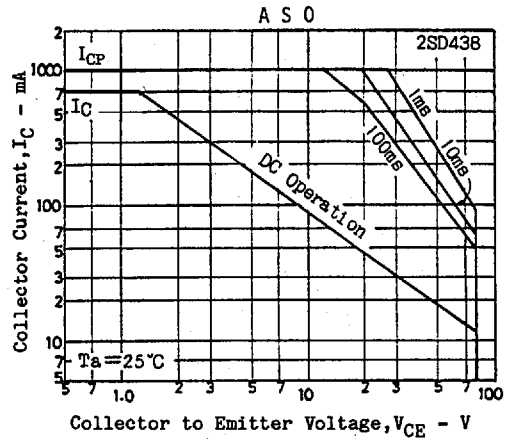
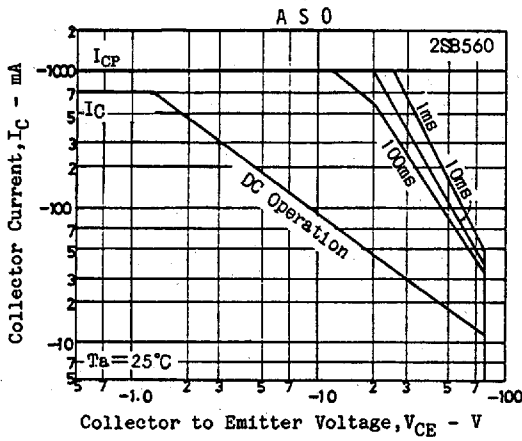
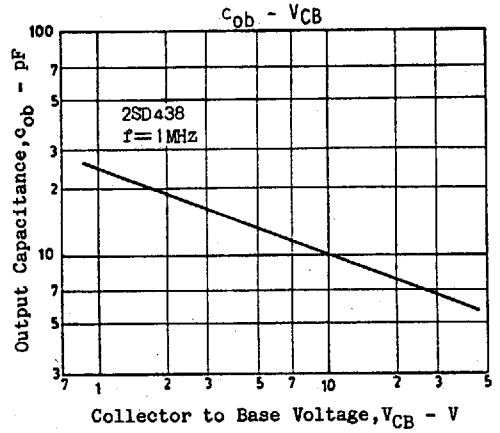
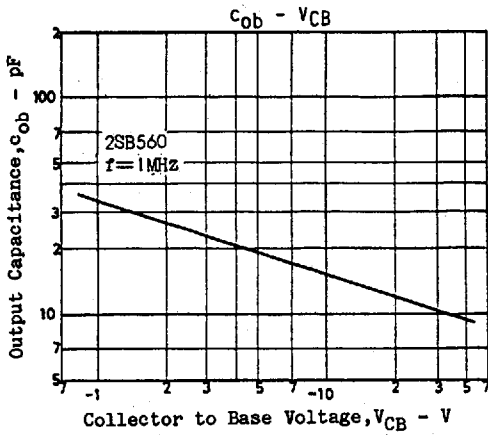
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TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

2SB560/2SD438



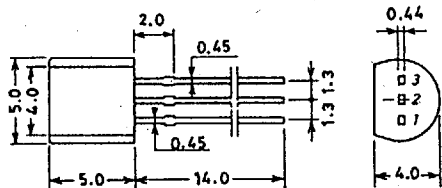
2SB560/2SD438



CASE OUTLINES OF LEAD FORMED SMALL SIGNAL TRANSISTORS

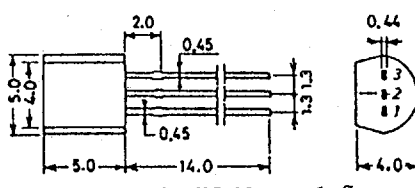
- All of Sanyo lead formed small signal transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.

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



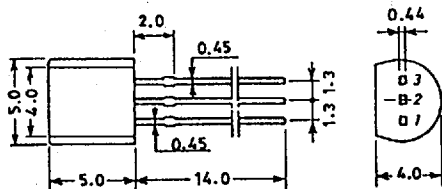
JEDEC : TO-92 1: Emitter
EIAJ : SC-43 2: Collector
SANYO : NP 3: Base

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



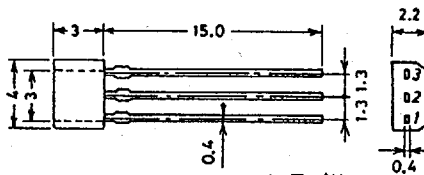
JEDEC : TO-92 1 : Source
EIAJ : SC-43 2 : Gate
SANYO : NP 3 : Drain

Case Outline 2004A (unit : mm)



JEDEC : TO-92 1 : Base
EIAJ : SC-43 2 : Emitter
SANYO : NP 3 : Collector

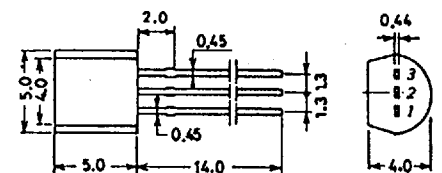
Case Outline 2033 (unit : mm)



1: Emitter
2: Collector
3: Base

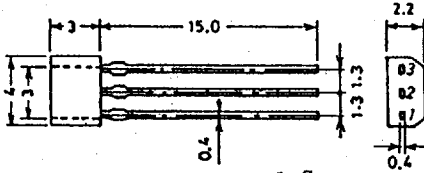
SANYO: SPA

Case Outline 2005A (unit : mm)



JEDEC : TO-92 1 : Drain
EIAJ : SC-43 2 : Source
SANYO : NP 3 : Gate

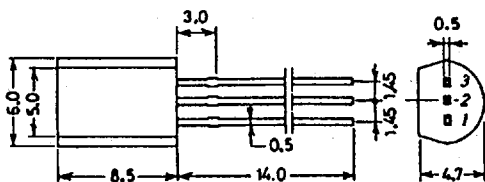
Case Outline 2034/2034A (unit: mm)



1: Source
2: Gate
3: Drain

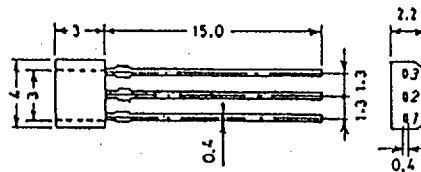
SANYO:SPA

Case Outline 2006A (unit : mm)



EIAJ : SC-51	1 : Emitter
SANYO : MP	2 : Collector
	3 : Base

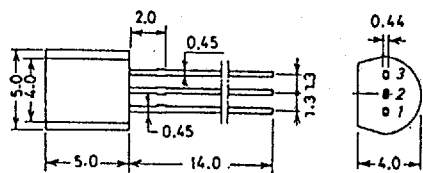
Case Outline 2040 (unit : mm)



1: Drain
2: Source
3: Gate

SANYO:SPA

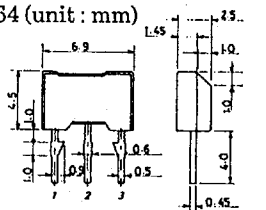
Case Outline 2061 (unit : mm)



JEDEC : TO-92
EIAJ : SC-43
SANYO : NP

1: Emitter
2: Base
3: Collector

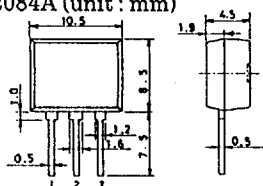
Case Outline 2064 (unit : mm)



1: Emitter
2: Collector
3: Base

SANYO: NMP

Case Outline 2084A (unit : mm)



1: Emitter
2: Collector
3: Base

SANYO: FLP