

<b>SANYO</b>	No.2468	<b>2SB1296/2SD1936</b>
		PNP/NPN Epitaxial Planar Silicon Transistors
		<b>AF Amp Applications</b>

**Applications**

- . AF power amp, medium-speed switching, small-sized motor drivers

**Features**

- . Large current capacity
- . Low collector to emitter saturation voltage
- . Wide ASO

( ): 2SB1296

**Absolute Maximum Ratings at Ta=25°C**

			unit
Collector to Base Voltage	$V_{CB0}$	(-)15	V
Collector to Emitter Voltage	$V_{CEO}$	(-)15	V
Emitter to Base Voltage	$V_{EBO}$	(-)5	V
Collector Current	$I_C$	(-)0.8	A
Collector Current(Pulse)	$I_{CP}$	(-)3	A
Collector Dissipation	$P_C$	300	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	$I_{CB0}$	$V_{CB}=(-)12V, I_E=0$			(-)100	nA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)4V, I_C=0$			(-)100	nA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)2V, I_C=(-)50mA$	140*		(560)* 800*	
Gain-Bandwidth Product	$h_{FE}(2)$	$V_{CE}=(-)2V, I_C=(-)800mA$	80			
	$f_T$	$V_{CE}=(-)2V, I_C=(-)50mA$		(300)		MHz
Output Capacitance	$c_{ob}$	$V_{CB}=(-)10V, f=1MHz$		200 (15)10		pF

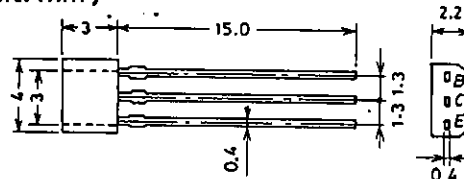
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\*: The 2SB1296/2SD1936 are classified by 50mA  $h_{FE}$  as follows:

2SB1296	140	S	280	200	T	400	280	U	560
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2SD1936	140	S	280	200	T	400	280	U	560	400	V	800
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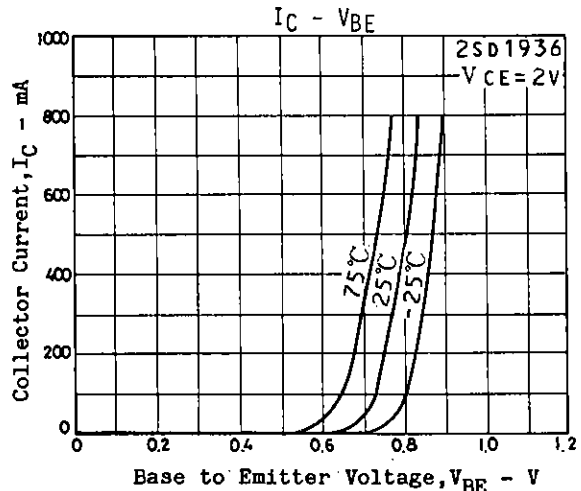
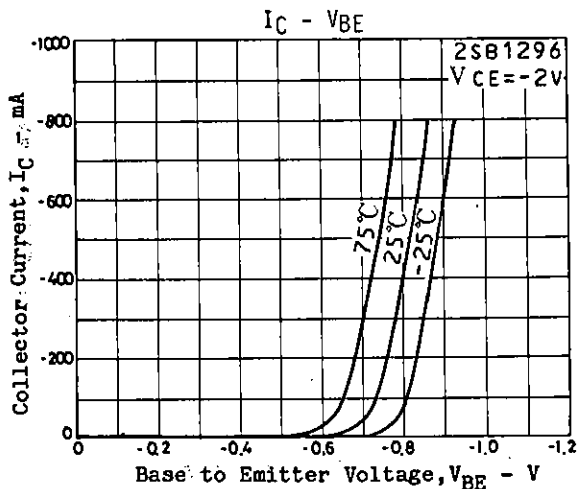
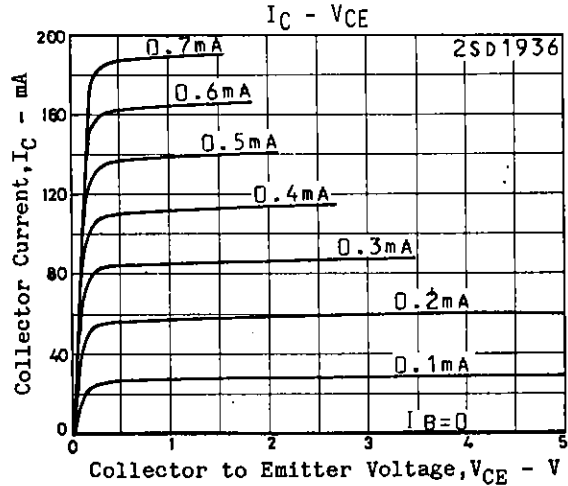
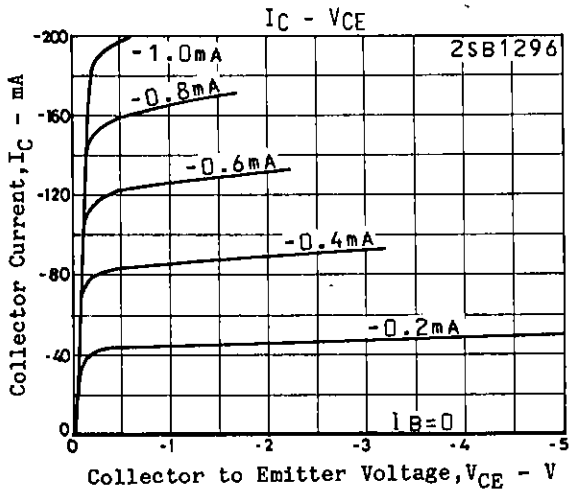
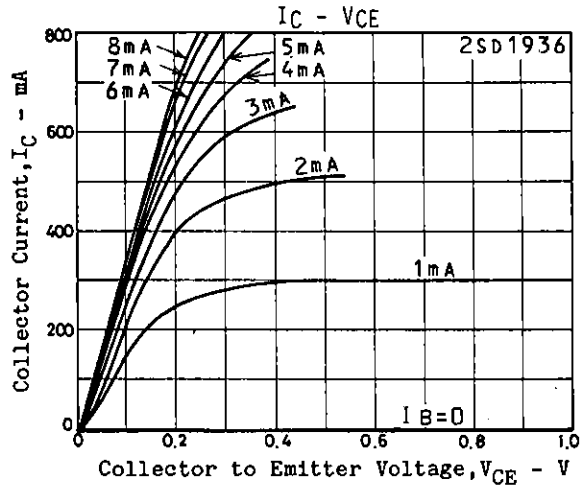
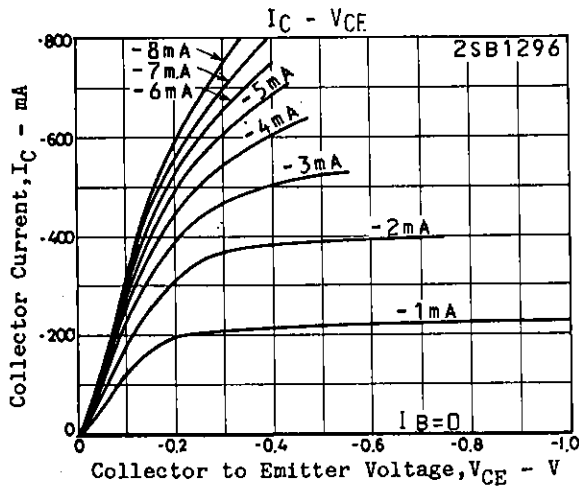
**Package Dimensions 2033**  
(unit: mm)

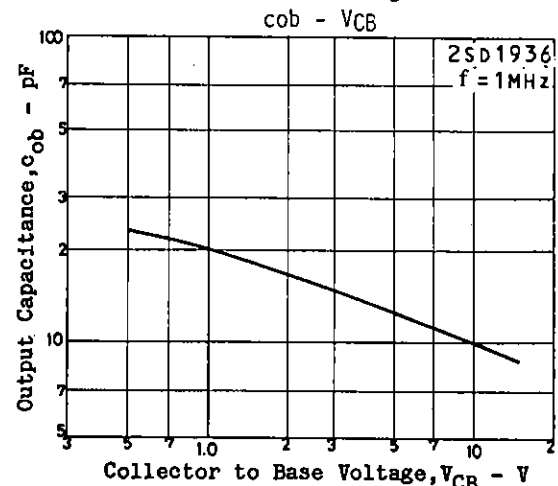
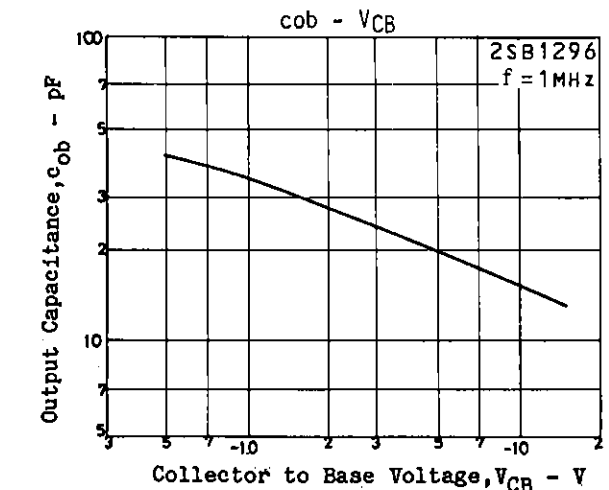
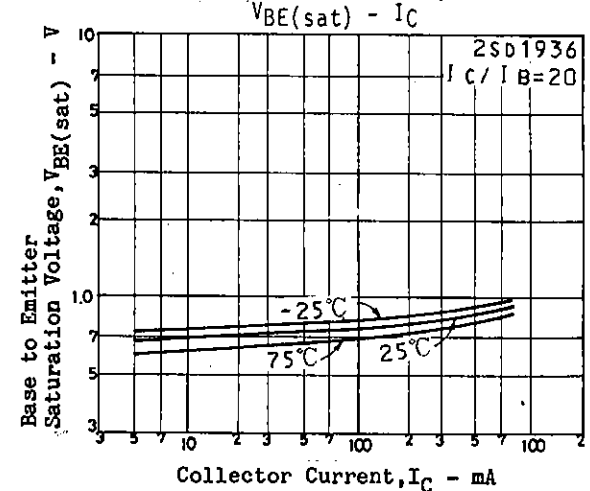
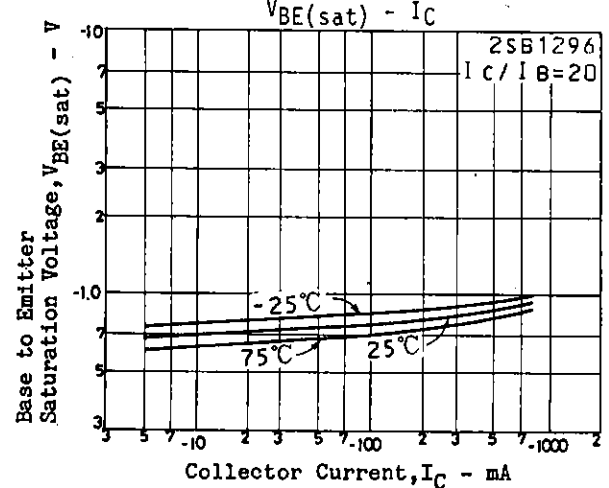
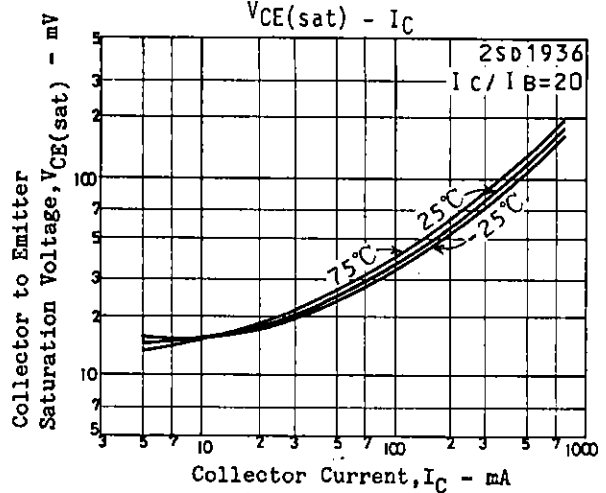
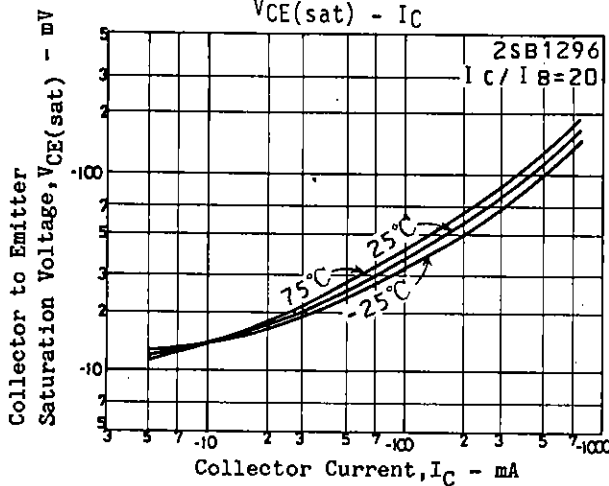
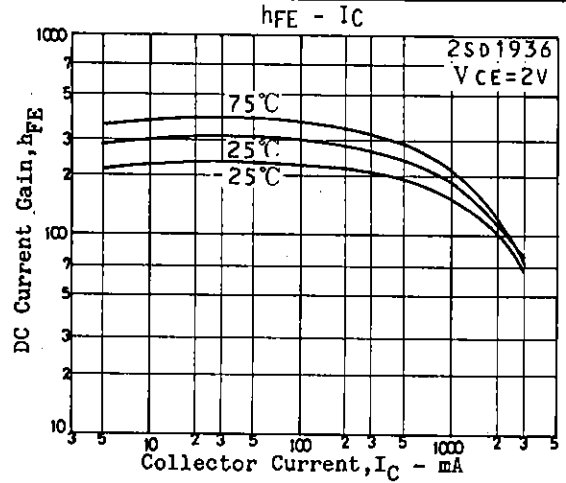
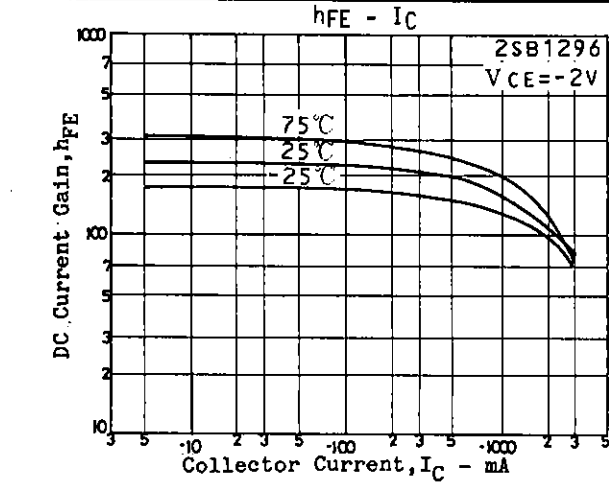


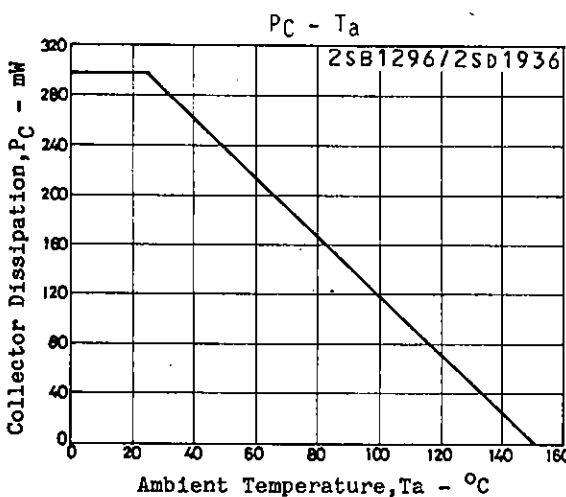
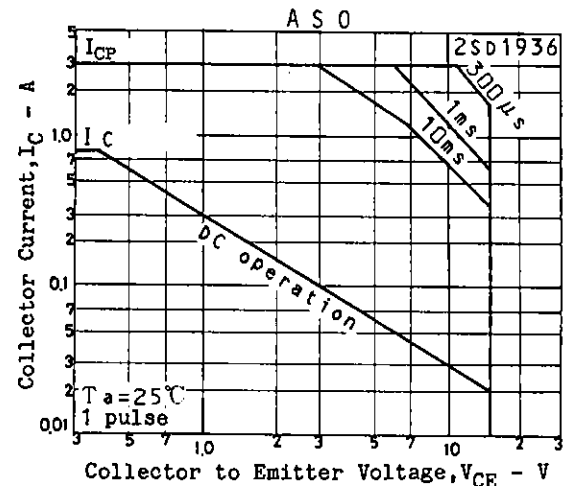
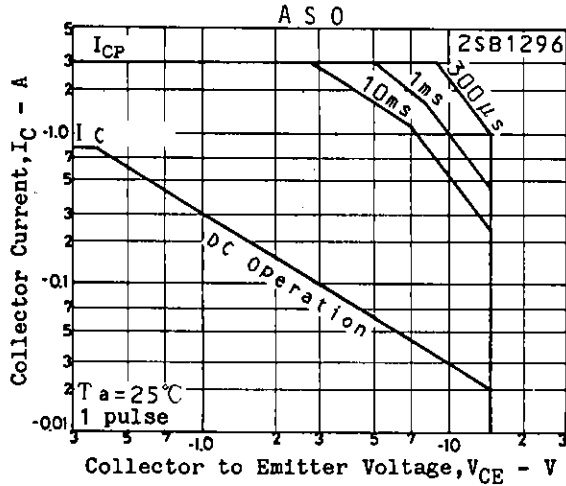
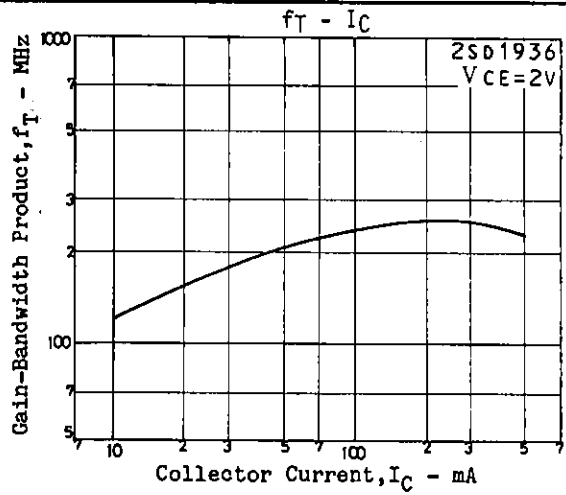
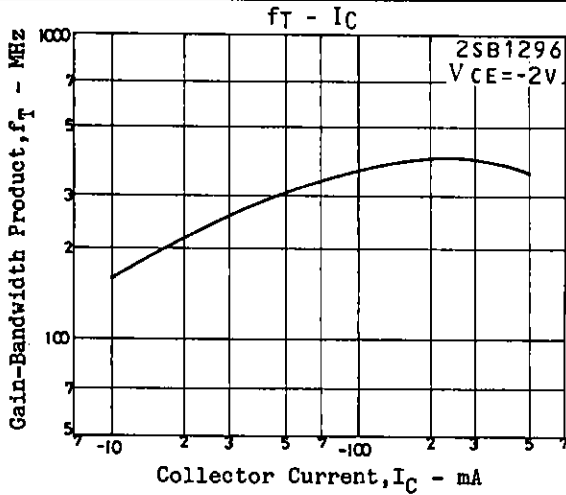
B: Base  
C: Collector  
E: Emitter  
SANYO: SPA

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			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)1}$	$I_C = (-)5mA, I_B = (-)0.5mA$	(-)10	(-)25		mV
	$V_{CE(sat)2}$	$I_C = (-)400mA, I_B = (-)20mA$	(-)100	(-)200		mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)400mA, I_B = (-)20mA$	(-)0.9	(-)1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)15			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)10\mu A, I_C = 0$	(-)5			V







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