



## 2SB1295/2SD1935

### Low-Frequency General-Purpose Amplifier Applications

#### Applications

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

#### Features

- Large current capacity.
- Low collector to emitter saturation voltage.
- Very small-sized package permitting sets to be made smaller and slimer.

( ) : 2SB1295

#### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		(-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	$P_C$		200	mW
Junction Temperature	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

##### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=(-)12V, I_E=0$			(-100)	nA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=(-)4V, I_C=0$			(-100)	nA
DC Current Gain	$h_{FE1}$	$V_{CE}=(-)2V, I_C=(-)50mA$	135*		900*	
	$h_{FE2}$	$V_{CE}=(-)2V, I_C=(-)800mA$	80		(600)	

\* : The 2SB1295/2SD1935 are classified by 50mA  $h_{FE}$  as follows :

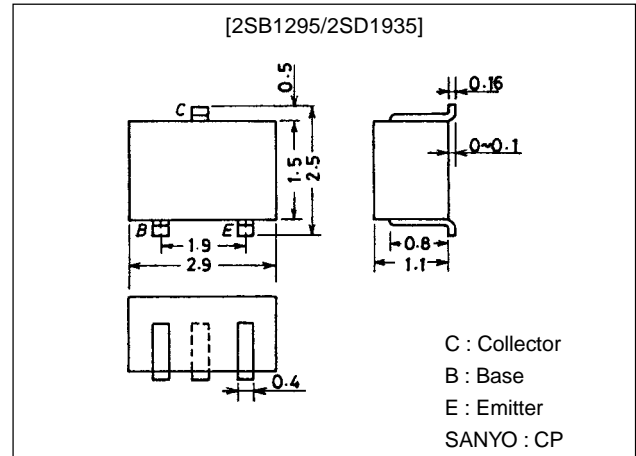
2SB1295	135	5	270	200	6	400	300	7	600			
2SB1935	135	5	270	200	6	400	300	7	600	450	8	900

Marking: 2SB1295 : UL/2SD1935 : CT  
 $h_{FE}$  rank: 2SB1295 : 5, 6, 7/2SD1935 : 5, 6, 7, 8

#### Package Dimensions

unit:mm

2018A



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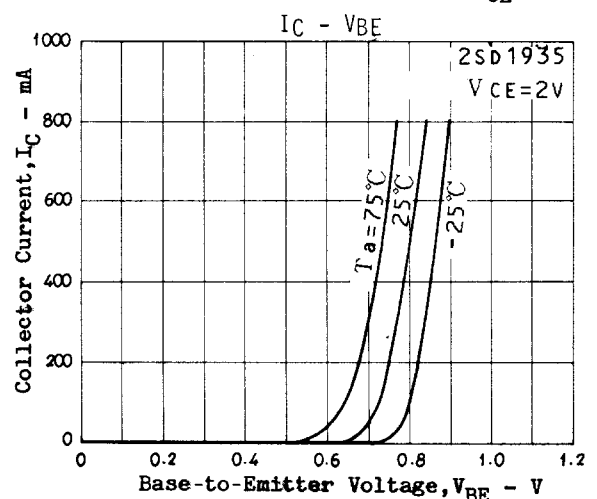
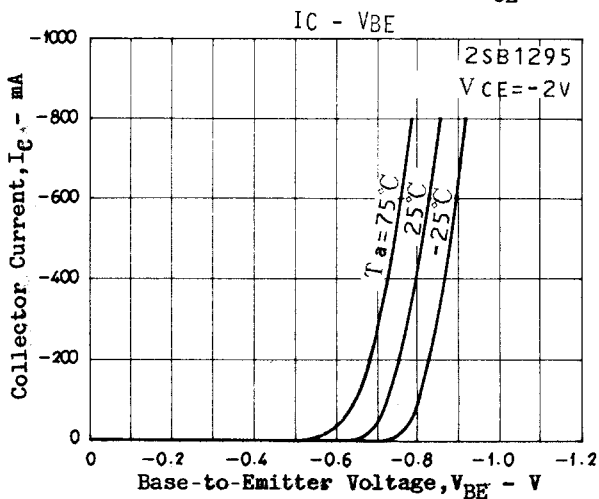
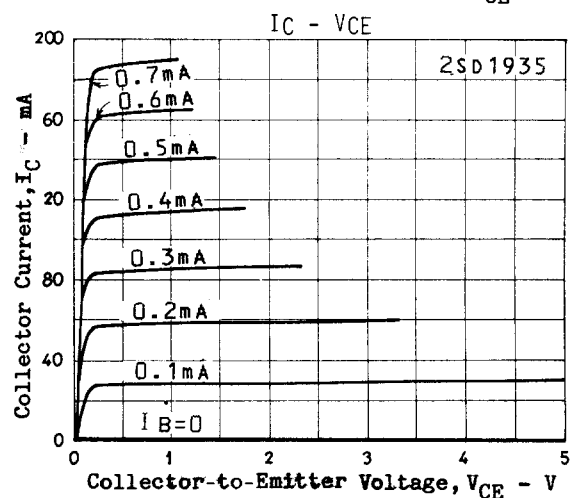
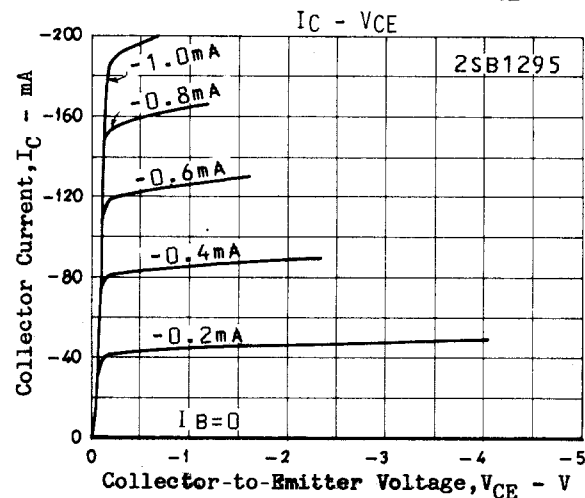
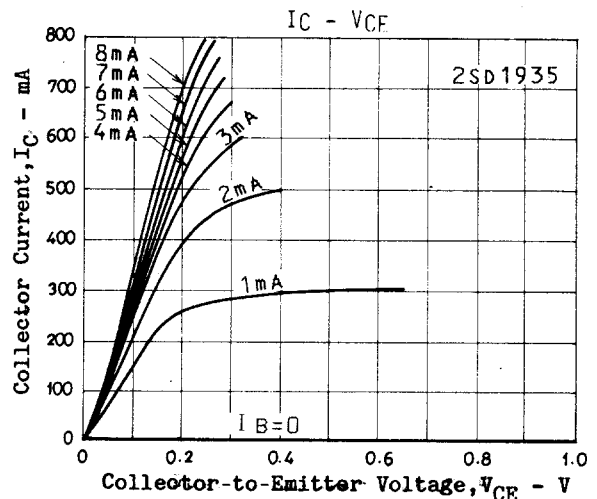
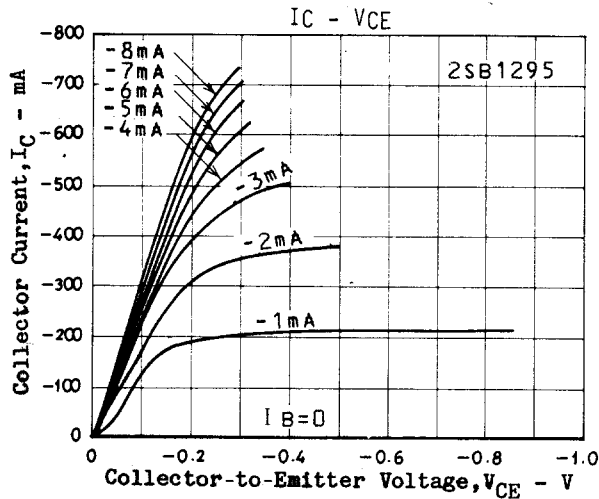
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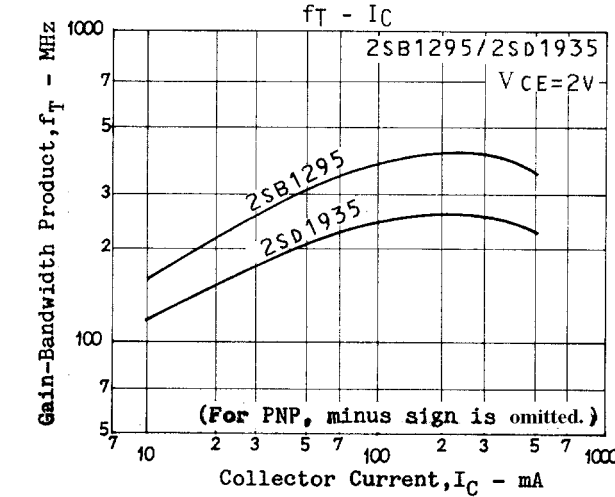
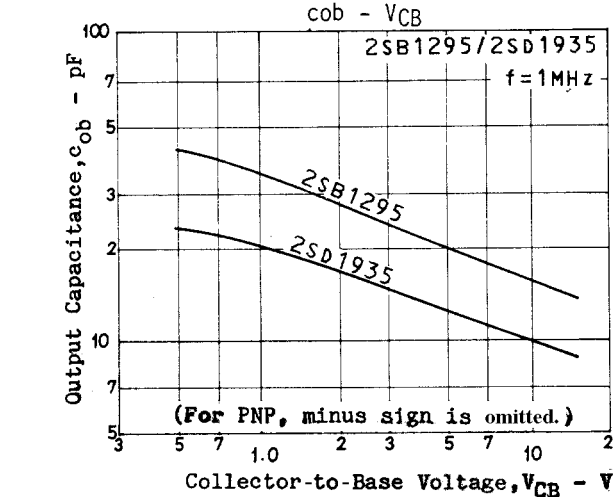
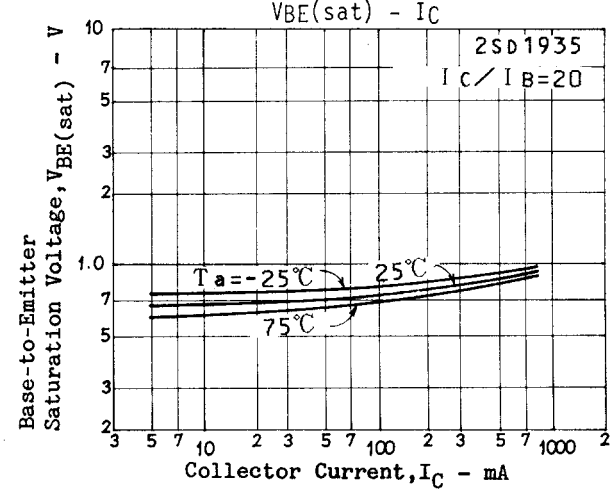
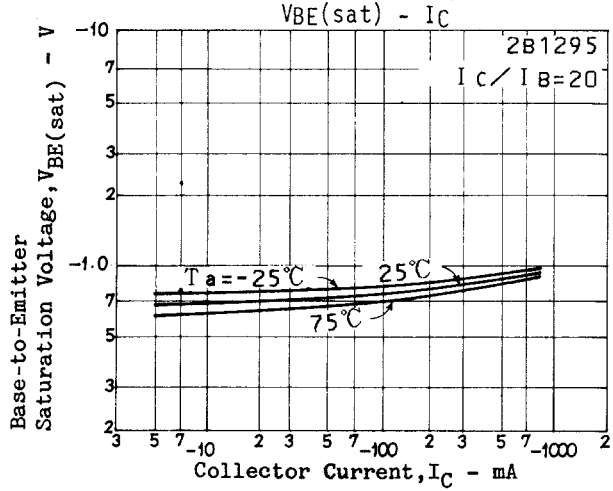
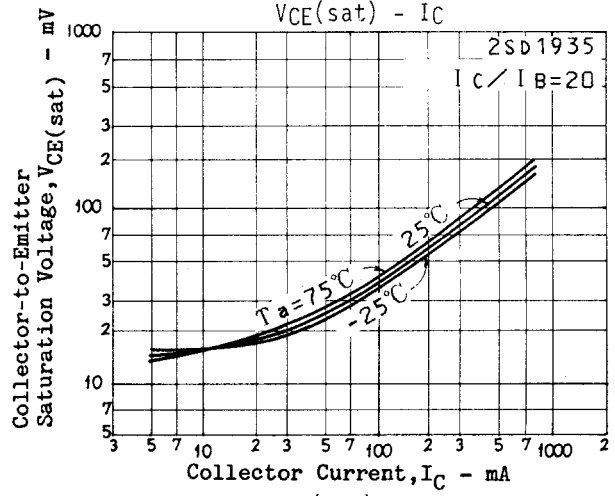
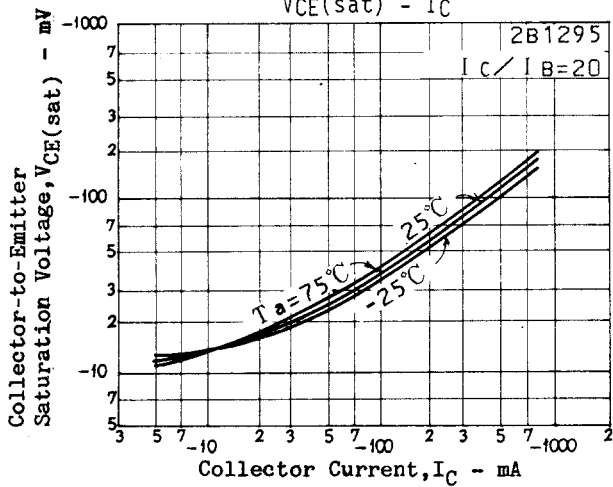
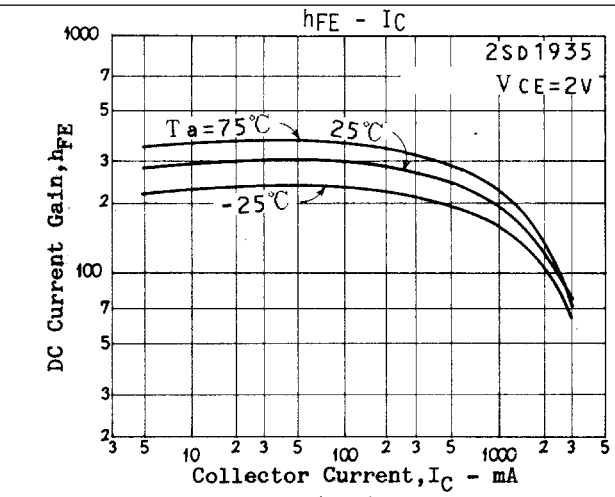
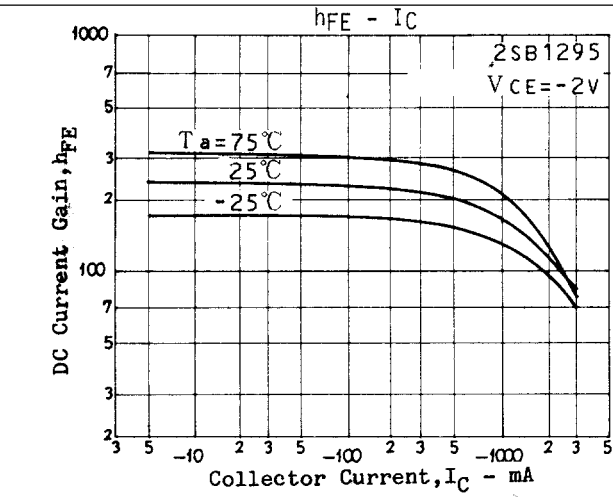
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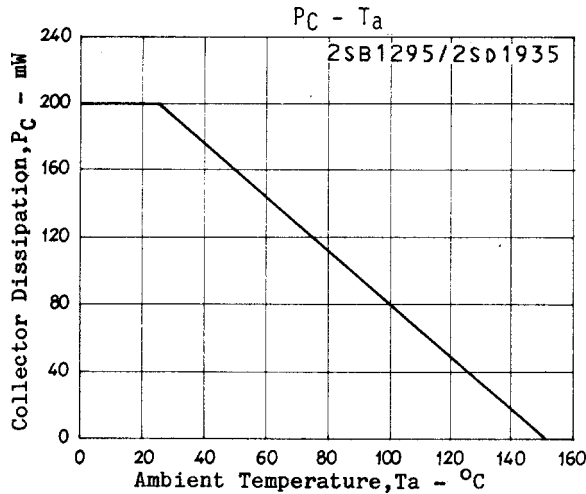
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gain-Bandwidth Product	$f_T$	$V_{CE}=(-)2V, I_C=(-)50mA$		200		MHz
				(300)		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=(-)10V, f=1MHz$		(15)		pF
				10		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=(-)5mA, I_B=(-)0.5mA$		(-)10	(-)25	mV
	$V_{CE(sat)2}$	$I_C=(-)400mA, I_B=(-)20mA$		(-)100	(-)200	mV
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)400mA, I_B=(-)20mA$		(-)0.9	(-)1.2	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$		(-)15		V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$		(-)15		V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$		(-)5		V



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