



2SA1882/2SC4984

Low-Frequency General-Purpose Amplifier Applications

Applications

- Low-frequency power amplifier applications.
- Medium-speed switching.
- Small-sized motor drivers.

Features

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

() : 2SA1882

Specifications

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

Parameter	Symbol	Conditions	Ratings	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		(-)1.5	A
Collector Current (Pulse)	I_{CP}		(-)3	A
Base Current	I_B		(-)300	mA
Collector Dissipation	P_C	Mounted on ceramic board (250mm ² ×0.8mm)	1.3	W
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)12\text{V}, I_E = 0$			(-)100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)100	nA
DC Current Gain	h_{FE1}	$V_{CE} = (-)2\text{V}, I_C = (-)50\text{mA}$	140*		560*	
	h_{FE2}	$V_{CE} = (-)2\text{V}, I_C = (-)1\text{A}$	70			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)2\text{V}, I_C = (-)50\text{mA}$		(300)		MHz
				200		MHz
Output Capacitance	C_{ob}	$V_{CB} = (-)10\text{V}, f = 1\text{MHz}$		(15)10		pF

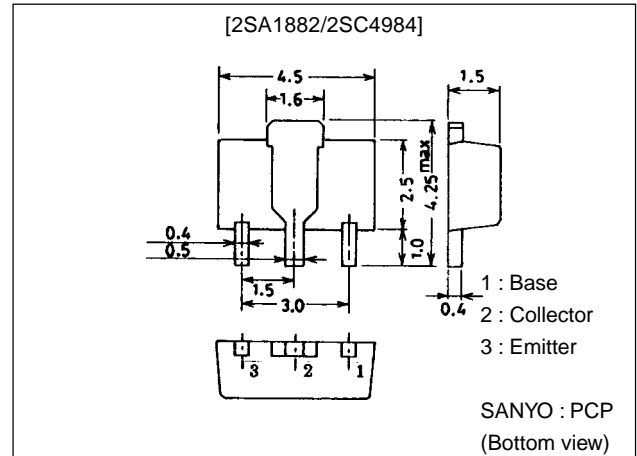
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Package Dimensions

unit:mm

2038A



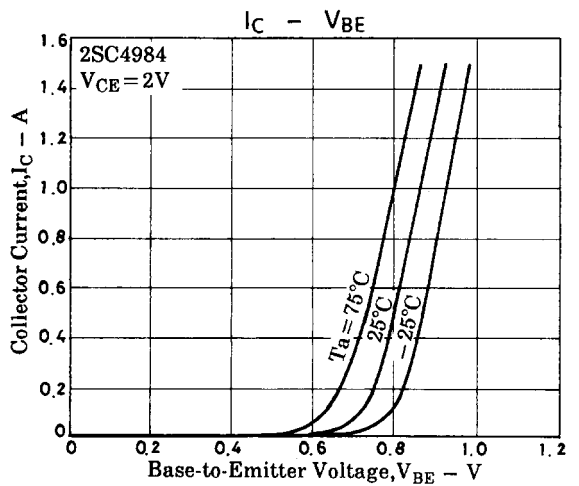
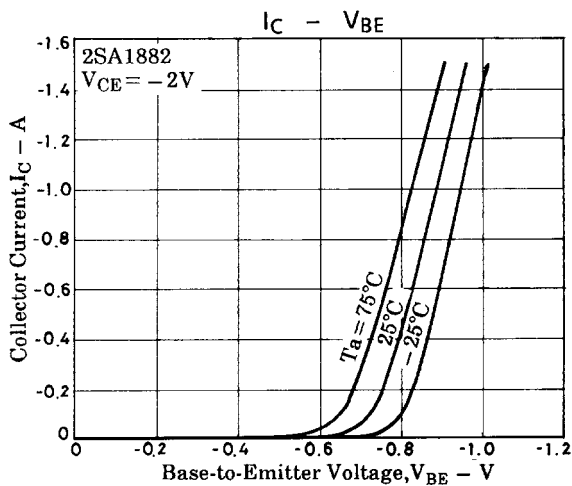
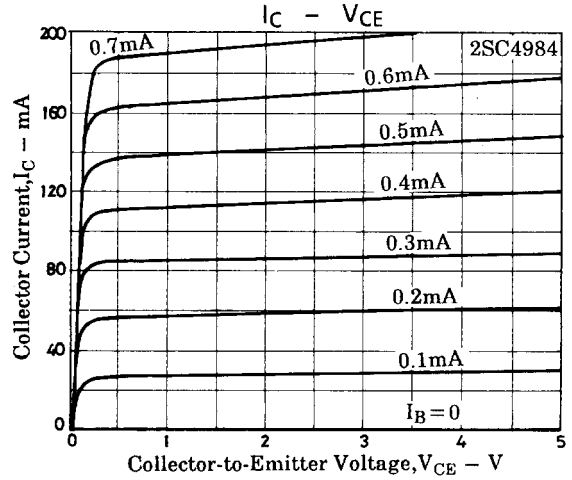
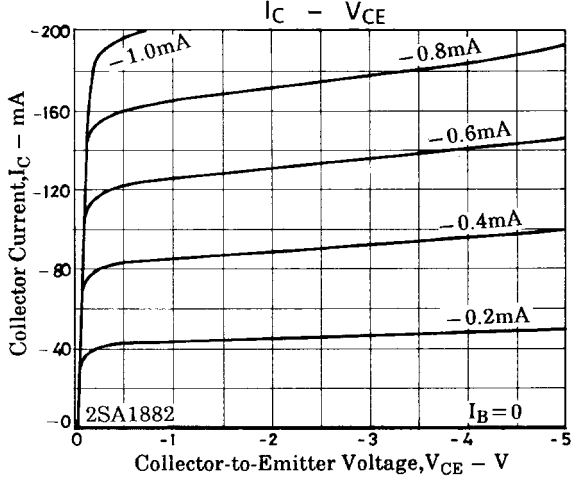
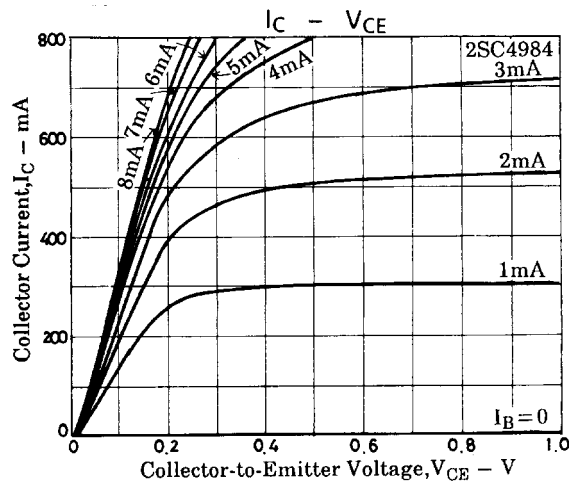
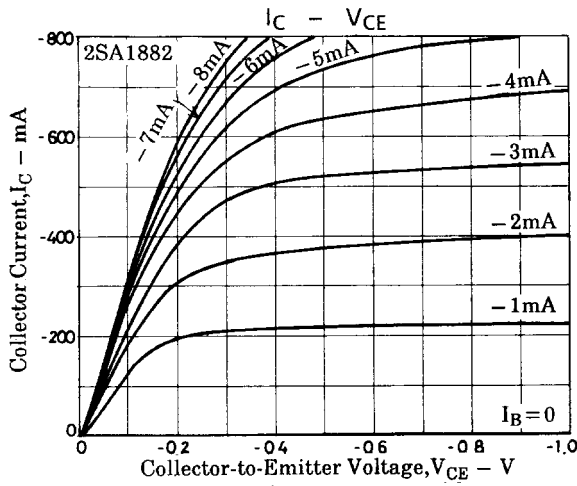
2SA1882/2SC4984

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=(-)5mA, I_B=(-)0.5mA$		(-10)	(-25)	mV
	$V_{CE(sat)2}$	$I_C=(-)500mA, I_B=(-)25mA$		(-120)	(-240)	mV
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)25mA$		(-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

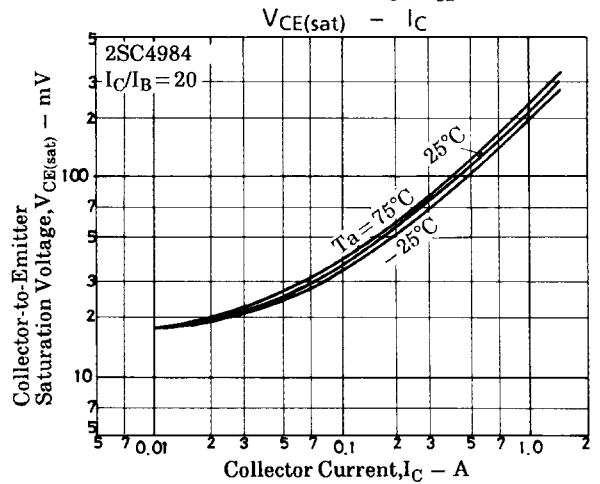
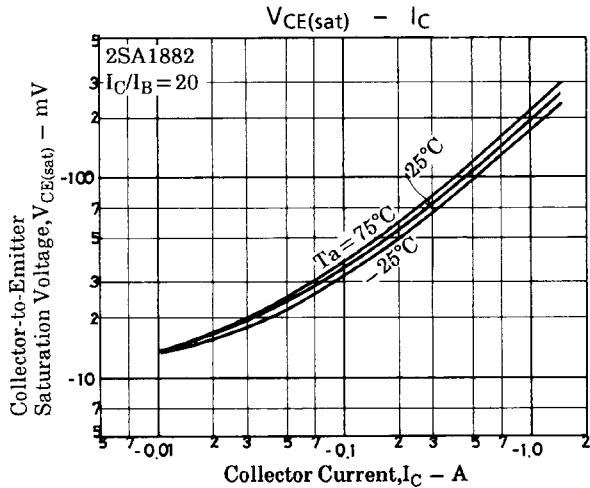
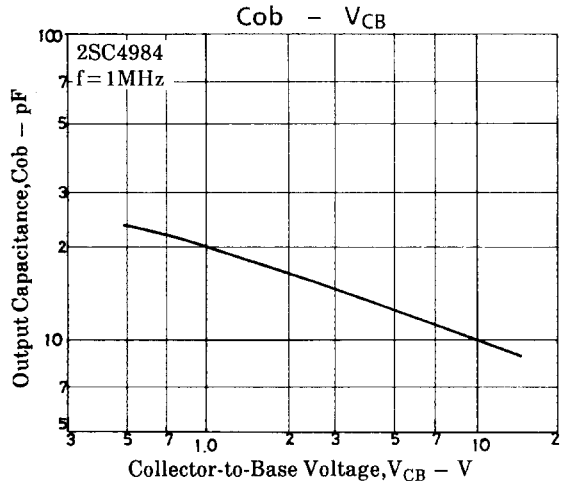
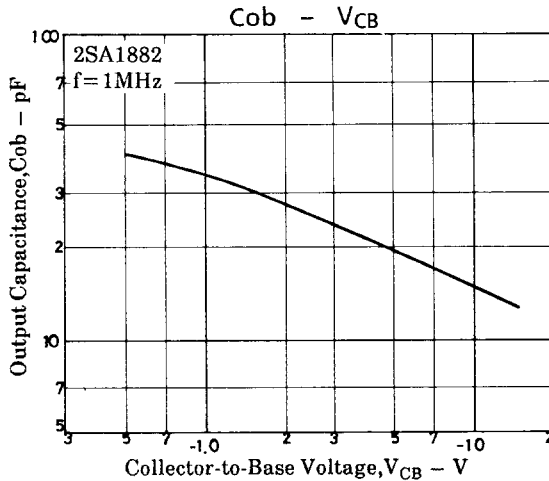
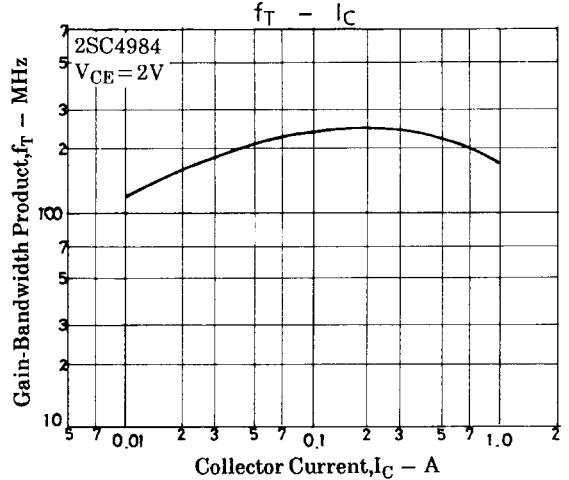
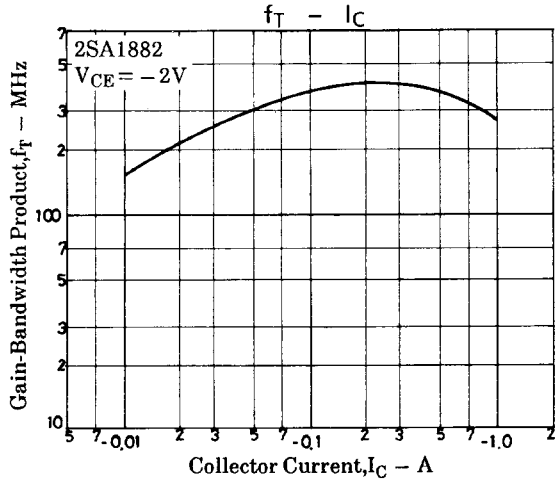
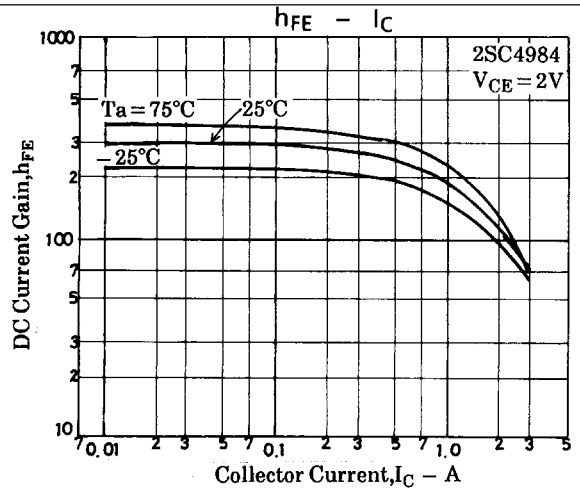
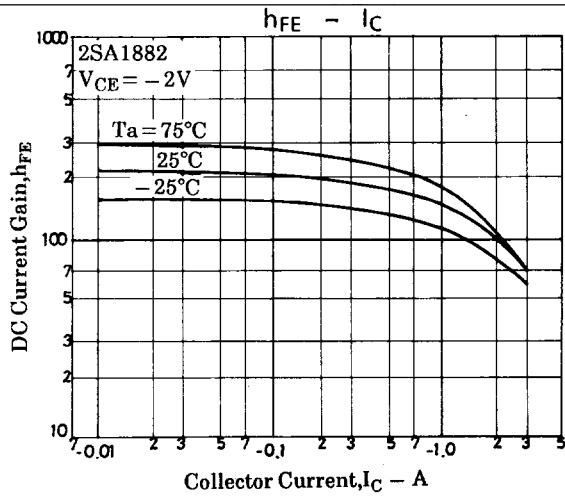
* : The 2SA1882/2SC4984 are classified by 50mA h_{FE} as follows :

140	S	280	200	T	400	280	U	560
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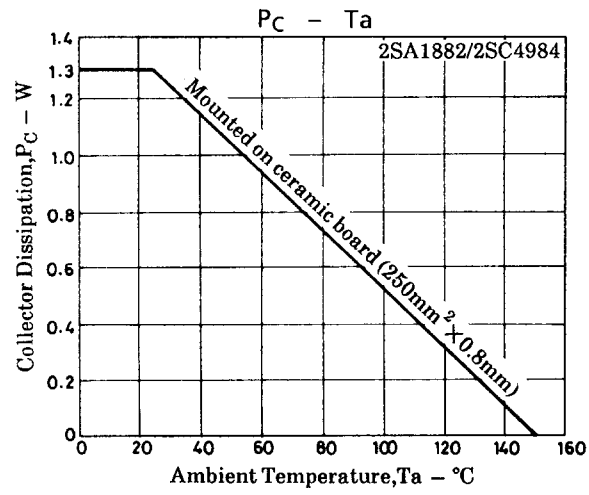
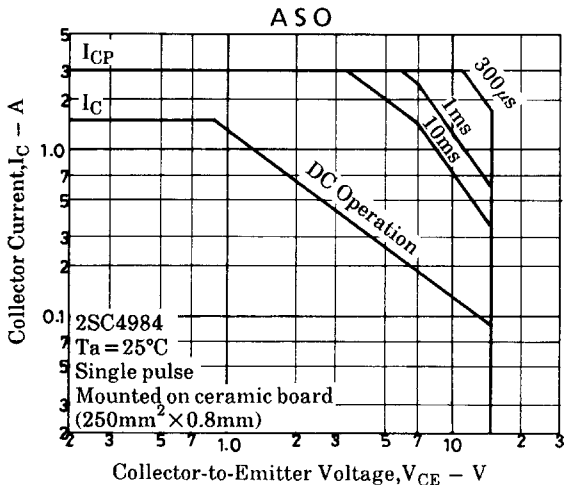
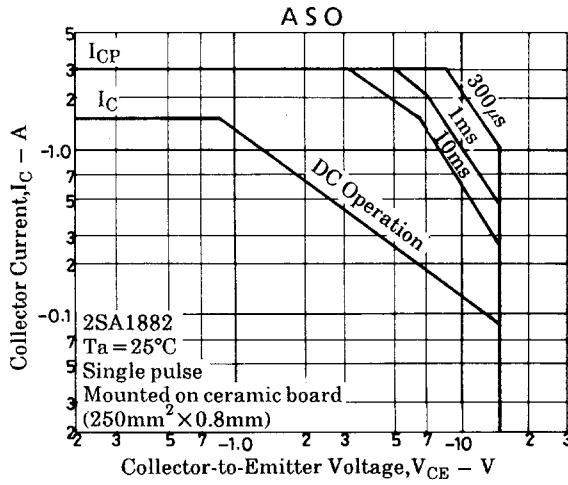
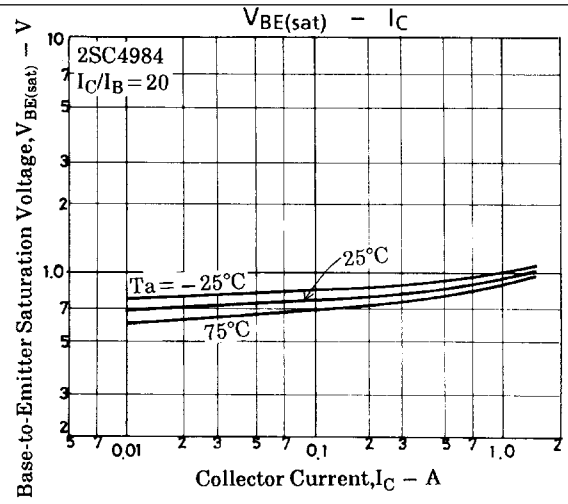
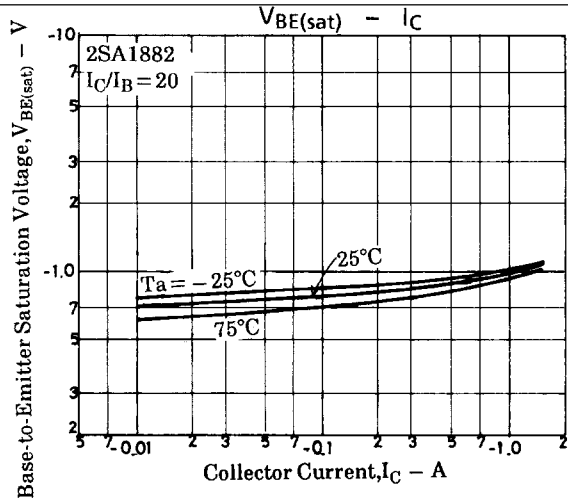
Marking : 2SA1882 : AI
2SC4984 : CT



2SA1882/2SC4984



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