



2SA1882/2SC4984

Low-Frequency General-Purpose Amplifier Applications

Applications

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

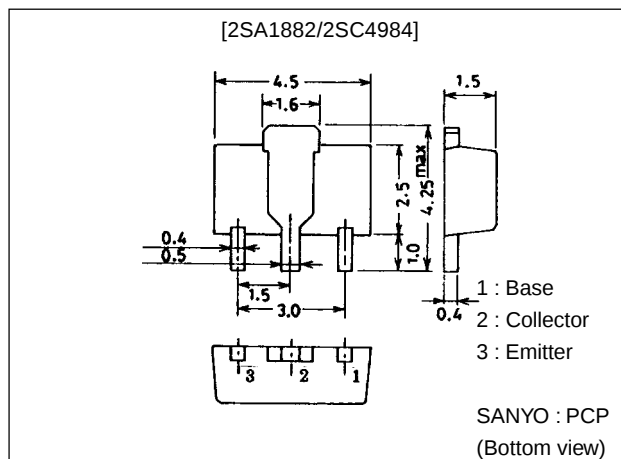
Features

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

Package Dimensions

unit:mm

2038A



() : 2SA1882

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		(-)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 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}	$V_{CE}=(-)2V, I_C=(-)50mA$	140*		560*	
	h_{FE2}	$V_{CE}=(-)2V, I_C=(-)1A$	70			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)2V, I_C=(-)50mA$		(300)		MHz
				200		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(15)10		pF

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91098HA (KT)/51794TH (KOTO) BX-0238 No.4633-1/5

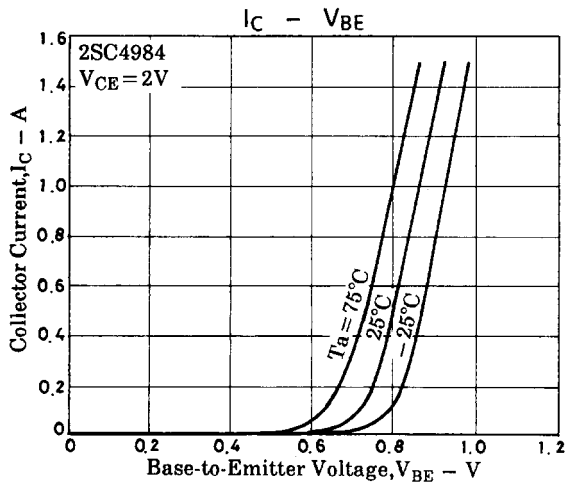
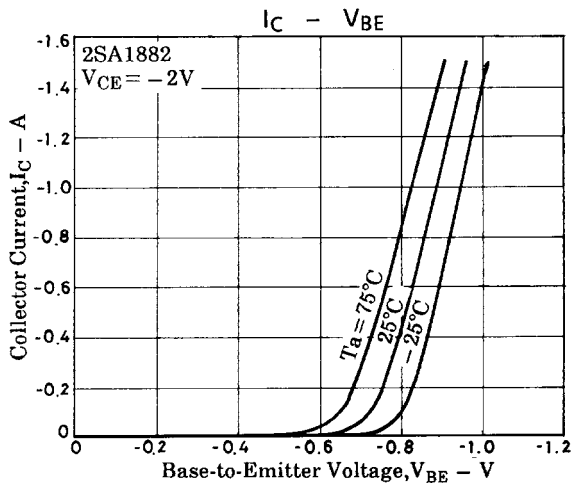
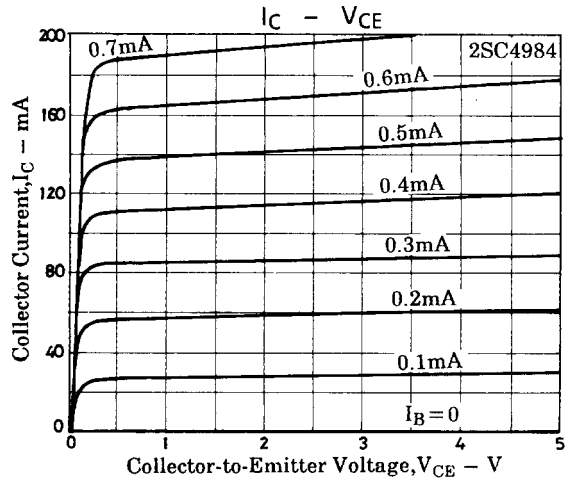
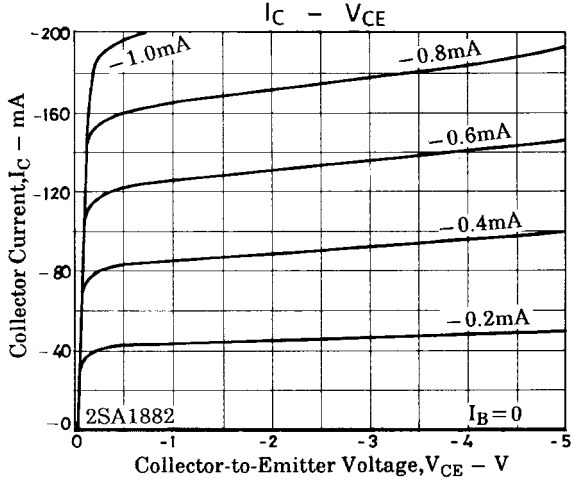
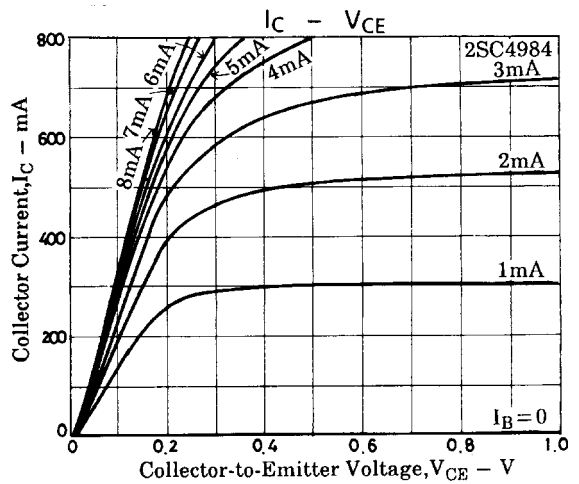
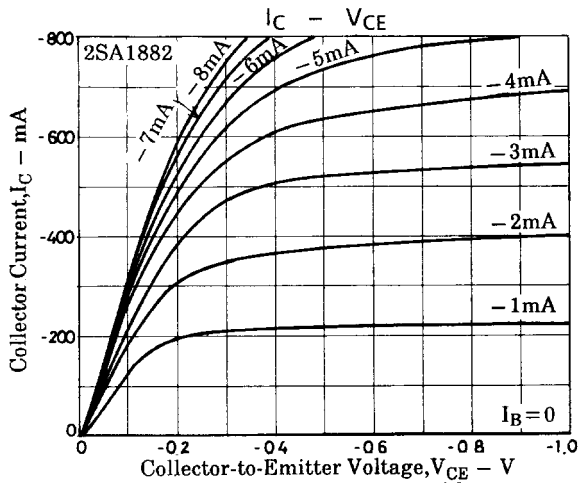
2SA1882/2SC4984

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

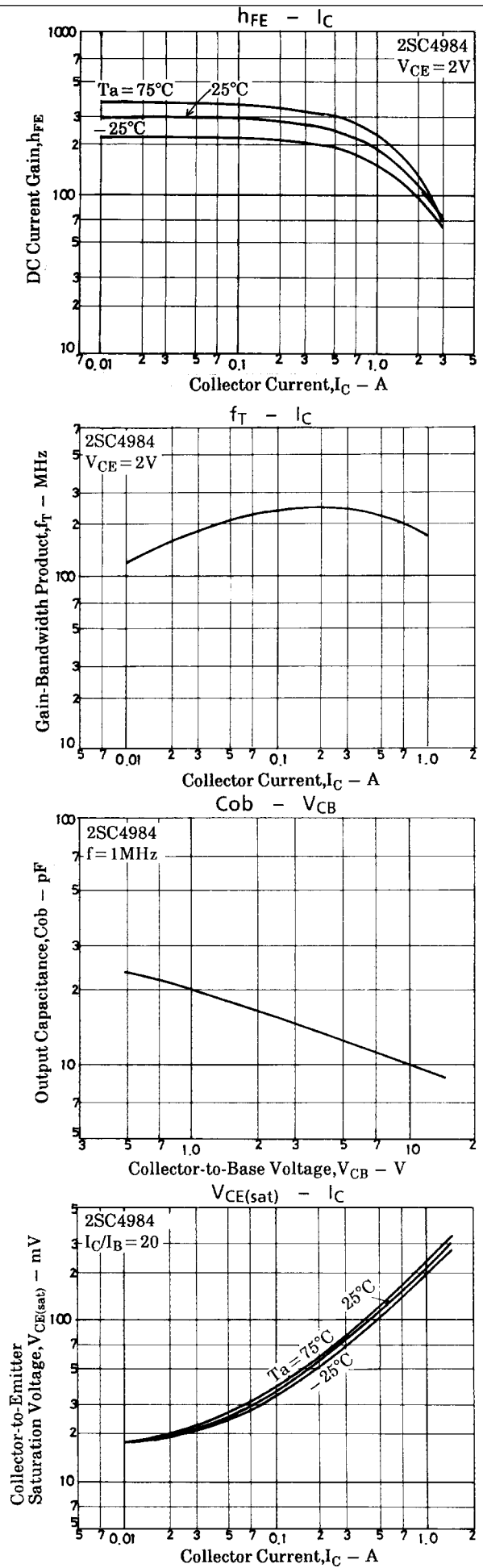
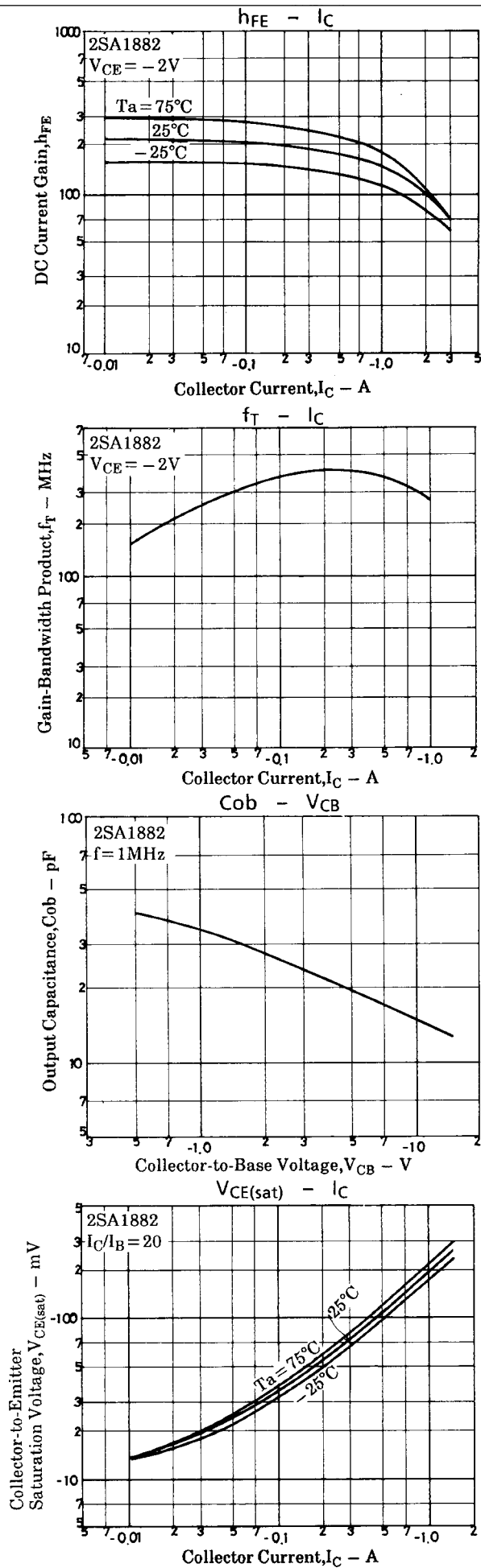
* : The 2SA1882/2SC4984 are classified by 50mA h_{FE} as follows :

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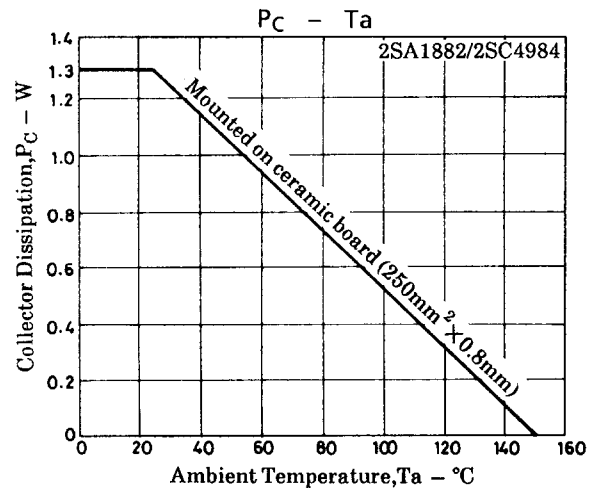
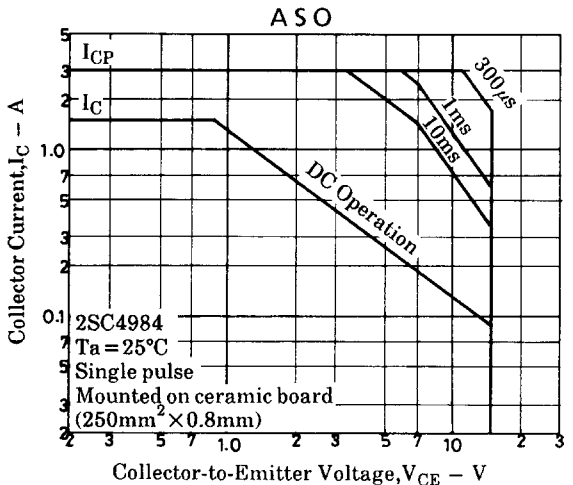
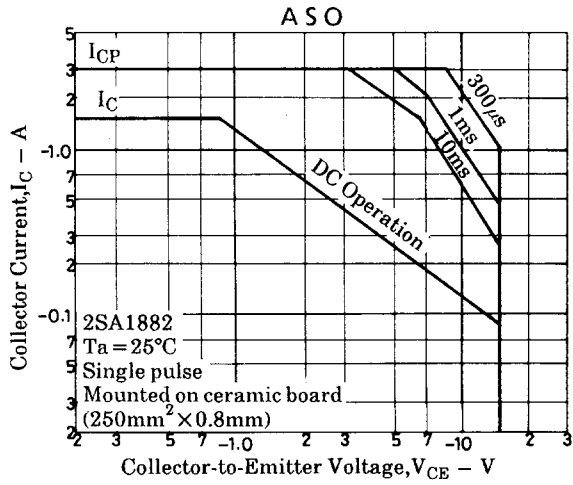
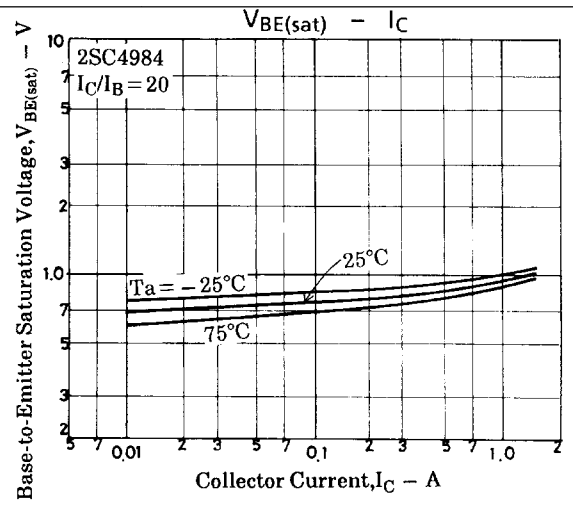
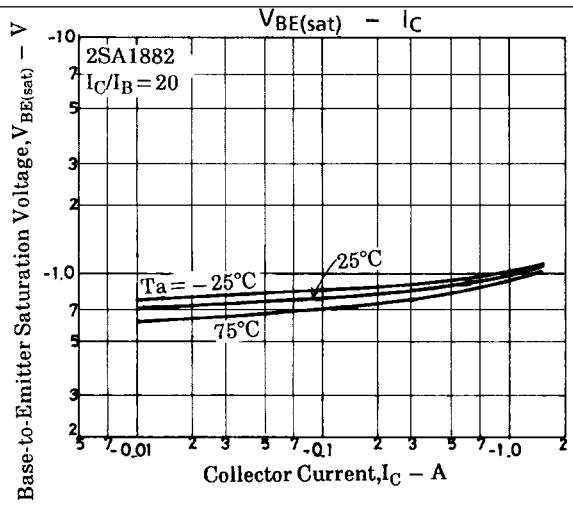
Marking : 2SA1882 : AI
2SC4984 : CT



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