


SANYO Semiconductors

DATA SHEET

2SA1882 / 2SC4984 — PNP / NPN Epitaxial Planar Silicon Transistors 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.

Specifications () : 2SA1882

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		(-)15	V
Collector-to-Emitter Voltage	VCEO		(-)15	V
Emitter-to-Base Voltage	VEBO		(-)5	V
Collector Current	IC		(-)1.5	A
Collector Current (Pulse)	ICP		(-)3	A
Base Current	IB		(-)300	mA
Collector Dissipation PC	Mounted on a ceramic board (250mm ² ×0.8mm)		1.3	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics

 at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	VCB=(-)12V, IE=0A			(-)100	nA
Emitter Cutoff Current	IEBO	VEB=(-)4V, IC=0A			(-)100	nA

Marking 2SA1882 : AI

2SC4984 : CT

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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)200		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(15)10		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=(-)5mA, I_B=(-)0.5mA$		(-)10	(-)25	mV
	$V_{CE(sat)2}$	$I_C=(-)500mA, I_B=(-)25mA$		(-)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	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0A$	(-)15			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)15			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0A$	(-)5			V

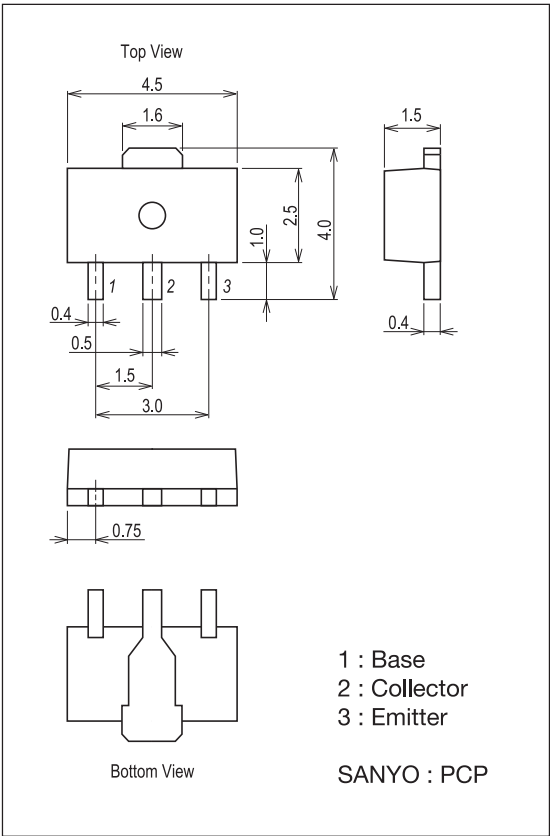
*: The 2SA1882 / 2SC4984 are classified by 50mA h_{FE} as follows:

Rank	S	T	U
h_{FE}	140 to 280	200 to 400	280 to 560

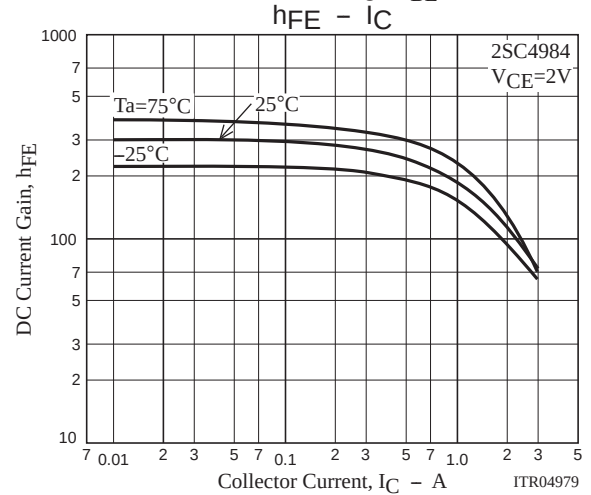
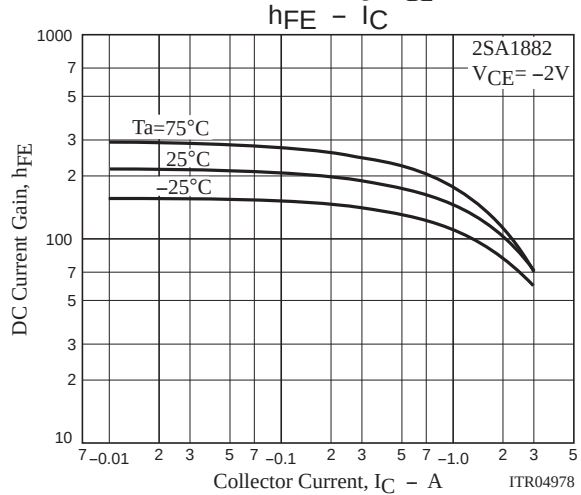
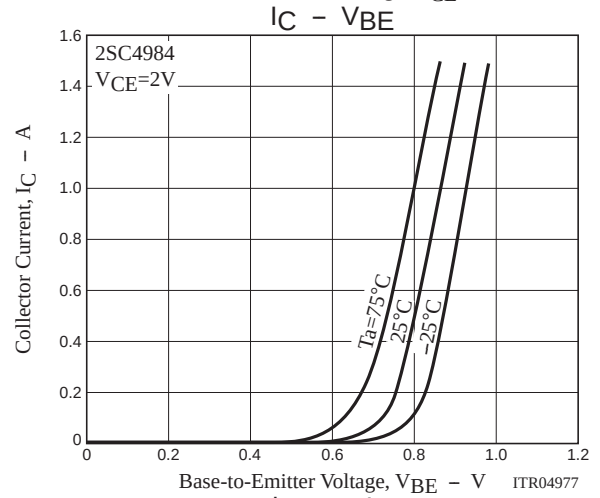
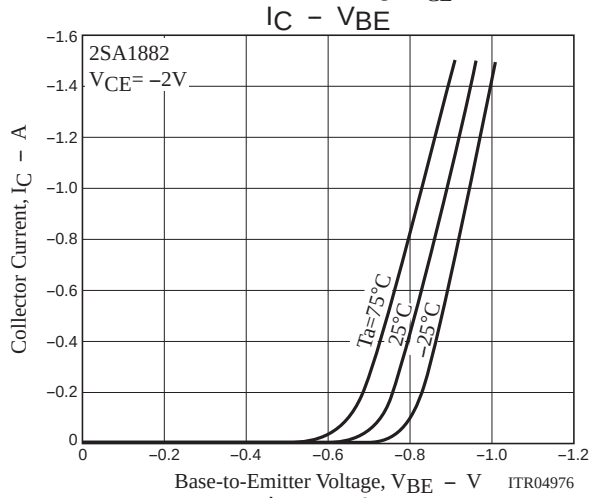
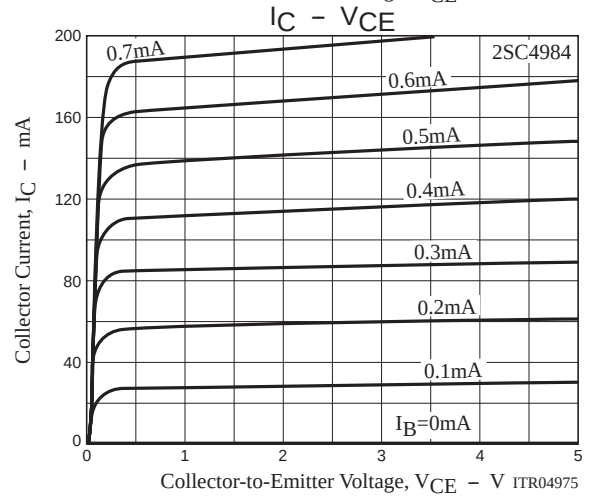
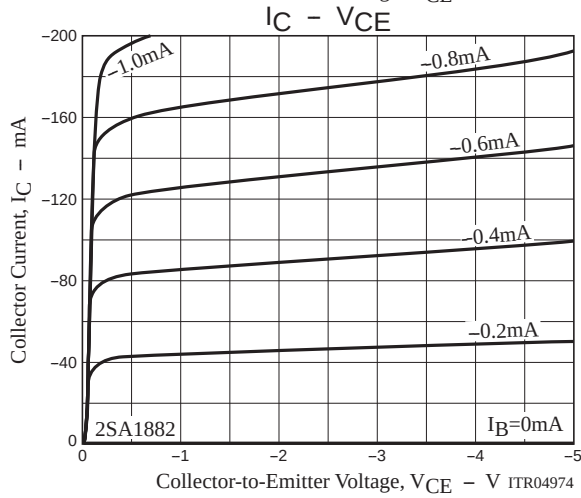
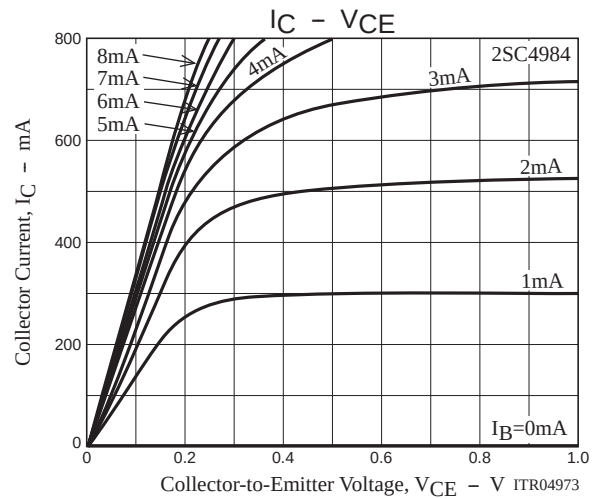
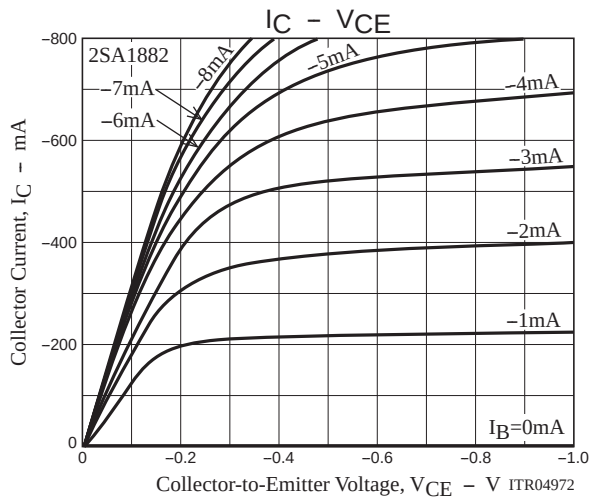
Package Dimensions

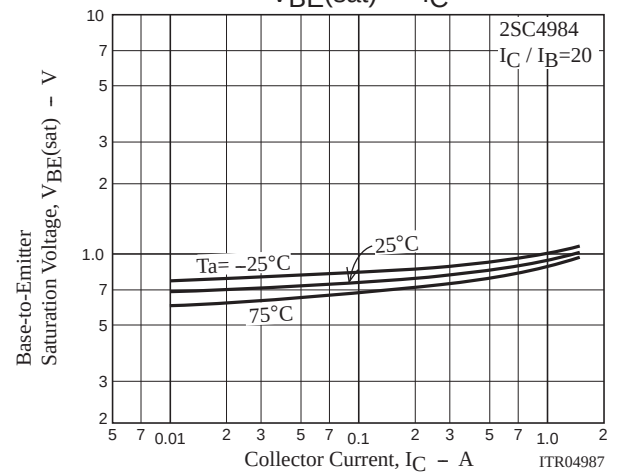
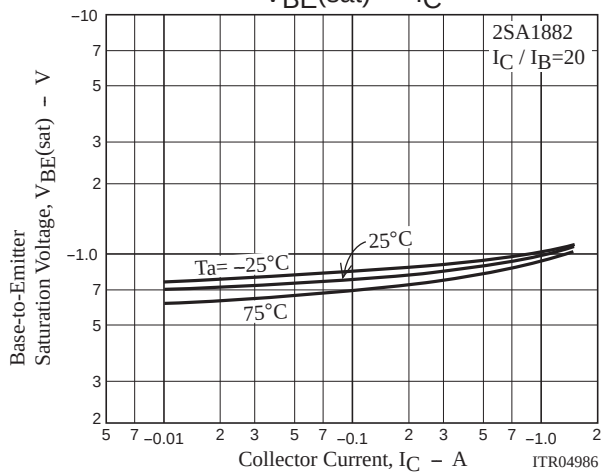
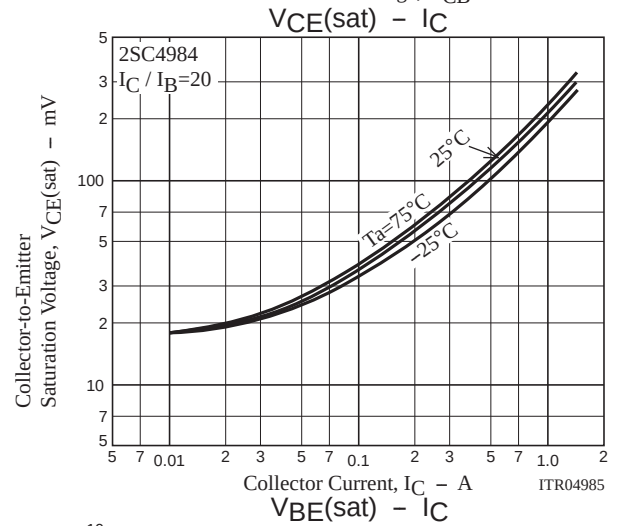
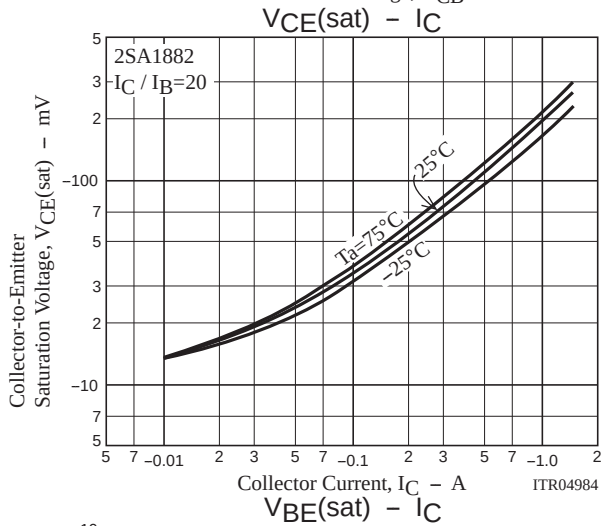
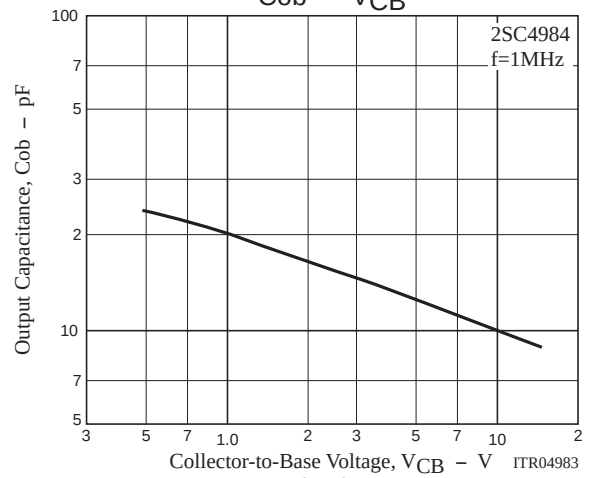
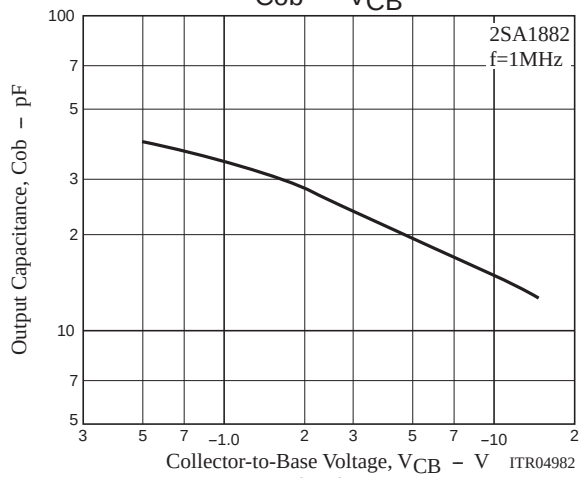
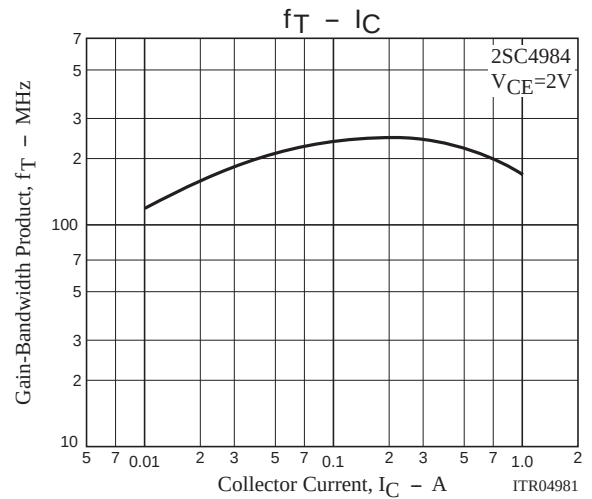
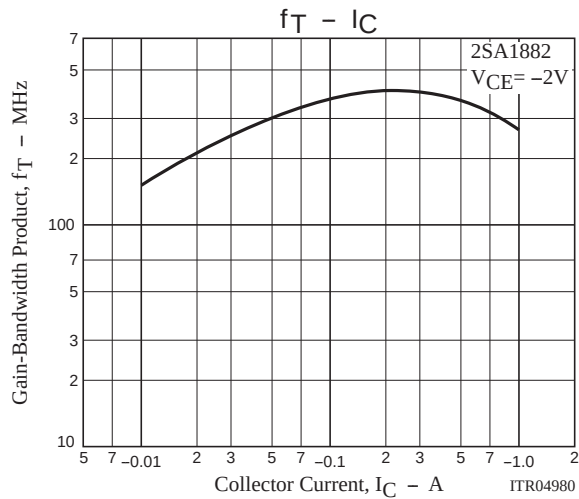
unit : mm (typ)

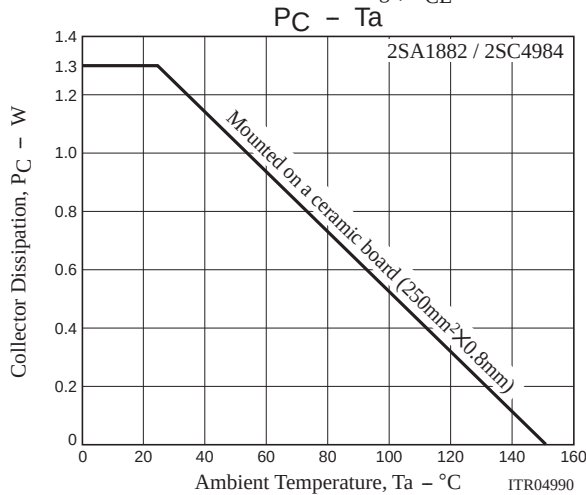
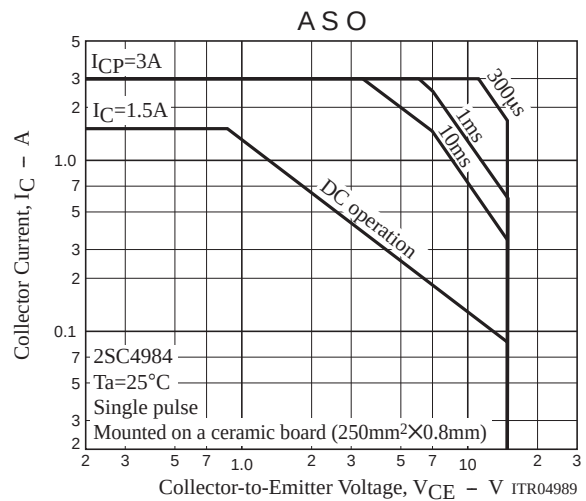
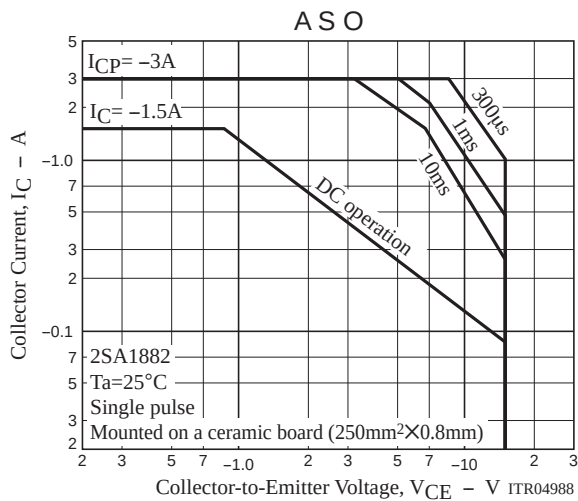
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2SA1882 / 2SC4984







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