

Ordering number:4661

PNP/NPN Epitaxial Planar Silicon Transistor



2SA1881/2SC4983

Low-Frequency General-Purpose Amplifier Applications

Features

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

Features

- Large current capacity.
- Low collector-to-emitter saturation voltage.
- Very small-sized package permitting 2SA1881/2SC4983-applied set to be made smaller and slimmer.

() : 2SA1881

Specifications

Absolute Maximum Ratings at Ta = 25°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)	A
Collector Current (Pulse)	I_{CP}		(-3)	A
Base Current	I_B		(-200)	mA
Collector Dissipation	P_C		250	mW
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

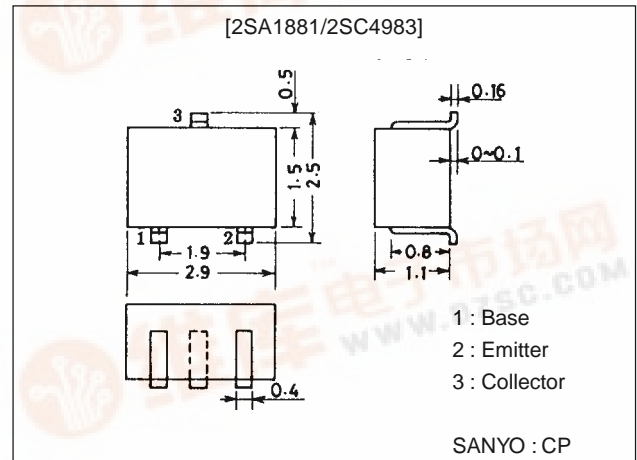
Electrical Characteristics at Ta = 25°C

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*		600*	
	h_{FE2}	$V_{CE} = (-)2V, I_C = (-)800mA$	80			
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

Package Dimensions

unit:mm

2018B



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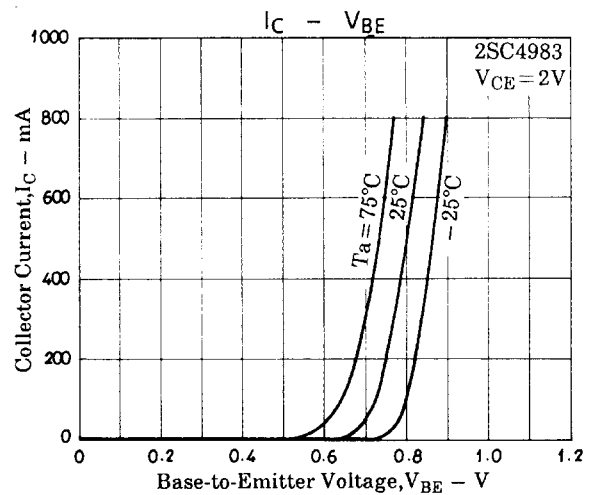
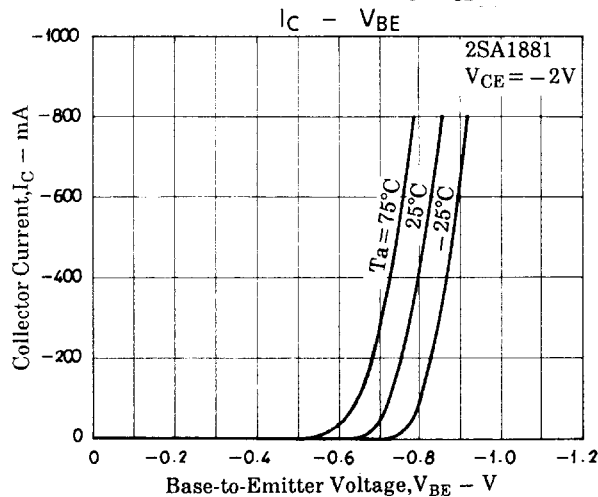
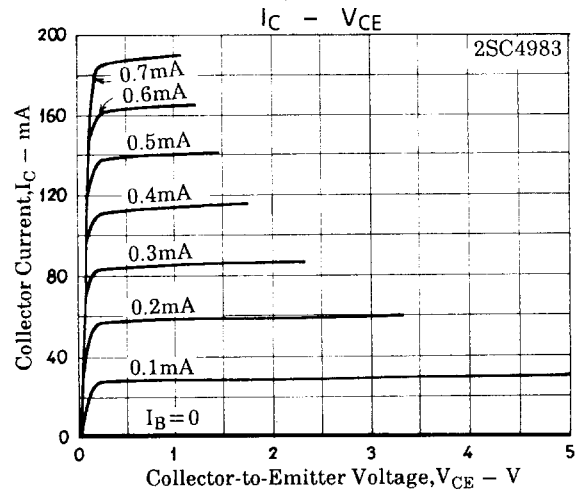
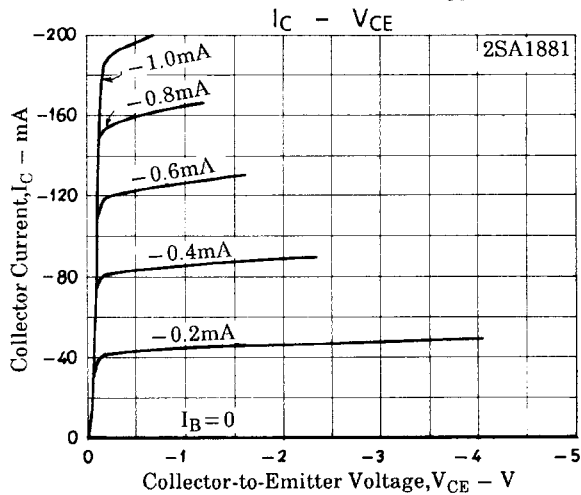
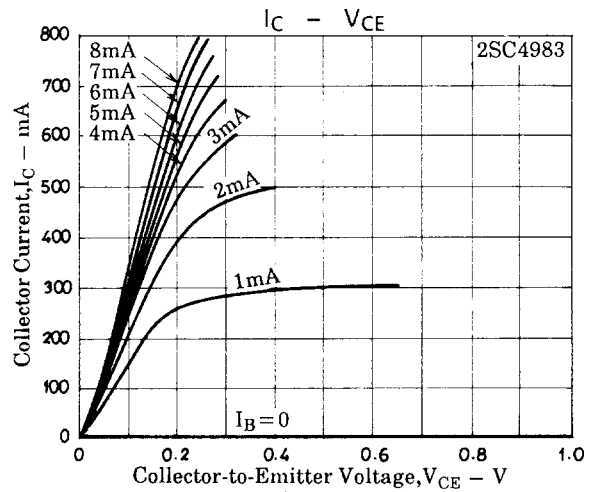
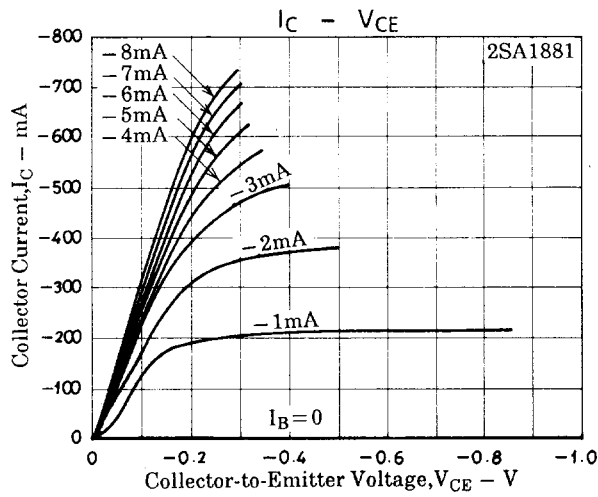
2SA1881/2SC4983

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

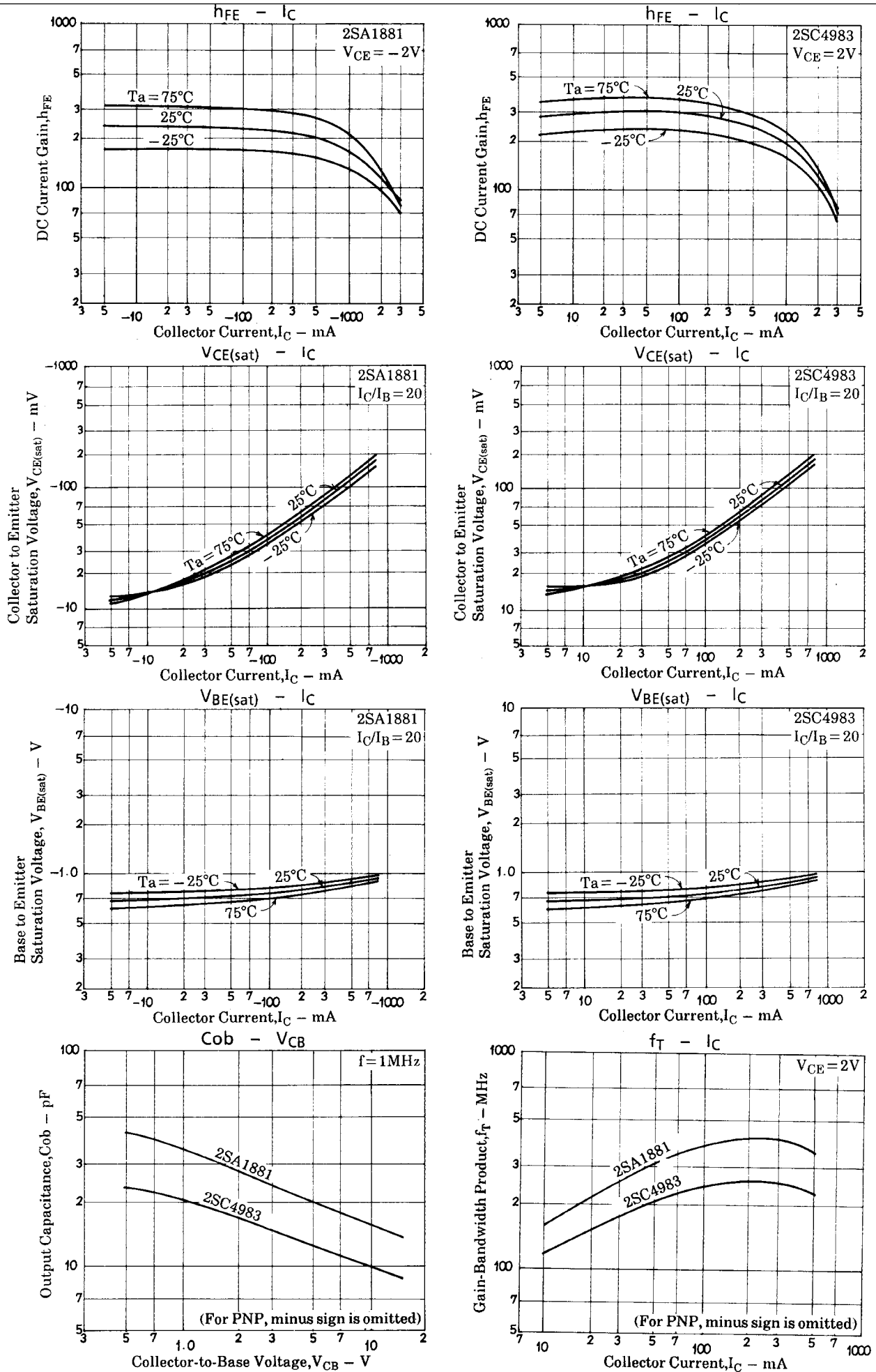
* : The 2SA1881/2SC4983 are classified by 50mA h_{FE} as follows :

135	5	270	200	6	400	300	7	600
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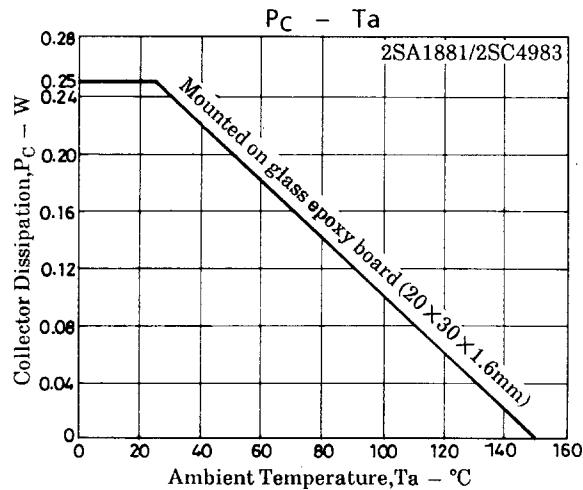
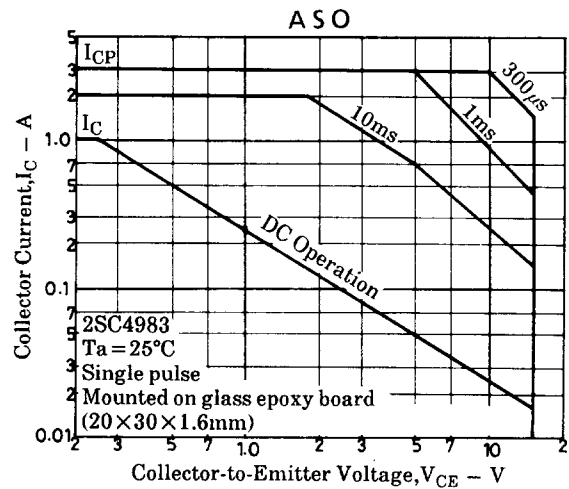
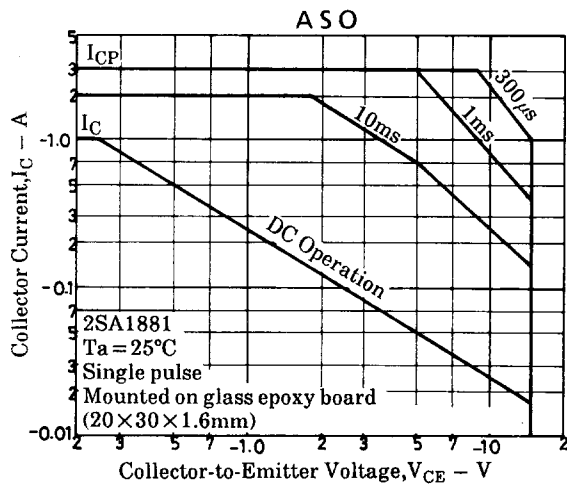
Marking : 2SA1881 : IS
2SC4983 : KN



2SA1881/2SC4983



2SA1881/2SC4983



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