



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 $T_a = 25^\circ\text{C}$

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	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	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to $+150$	$^\circ\text{C}$

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}	$V_{CE} = (-)2\text{V}, I_C = (-)50\text{mA}$	135^*		600^*	
	h_{FE2}	$V_{CE} = (-)2\text{V}, I_C = (-)800\text{mA}$	80			
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

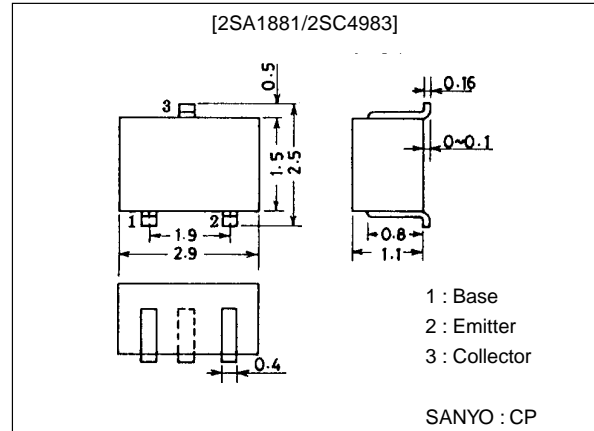
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Package Dimensions

unit:mm

2018B



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91098HA (KT)/51694TH (KOTO) A8-9412 No.4661-1/4

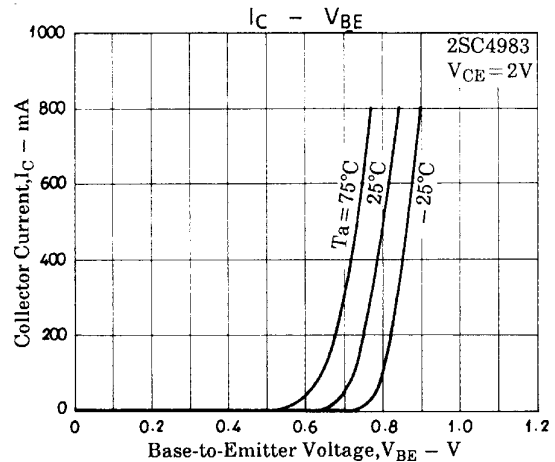
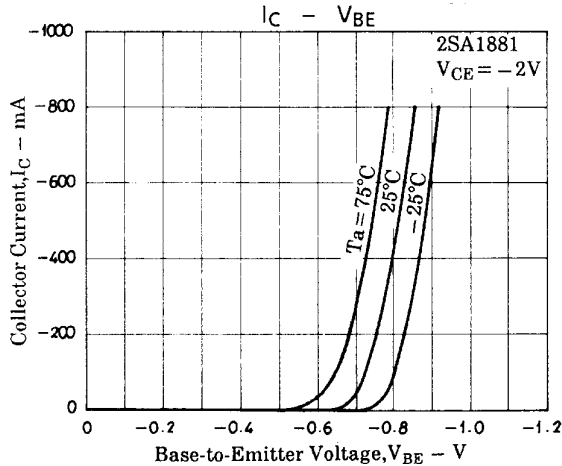
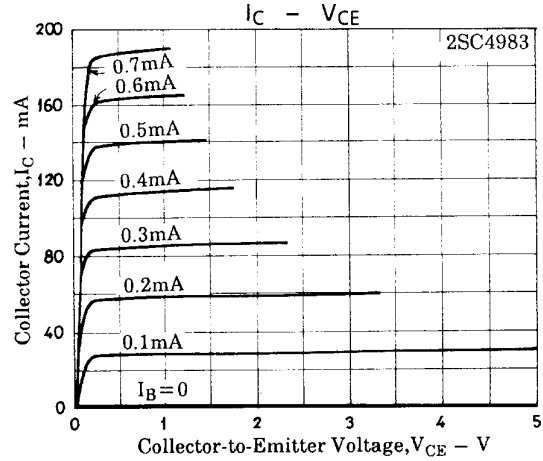
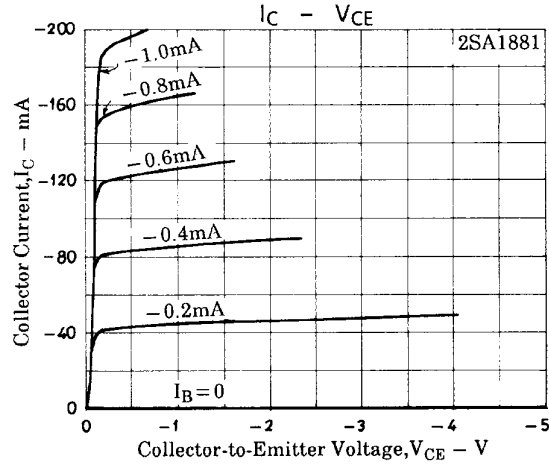
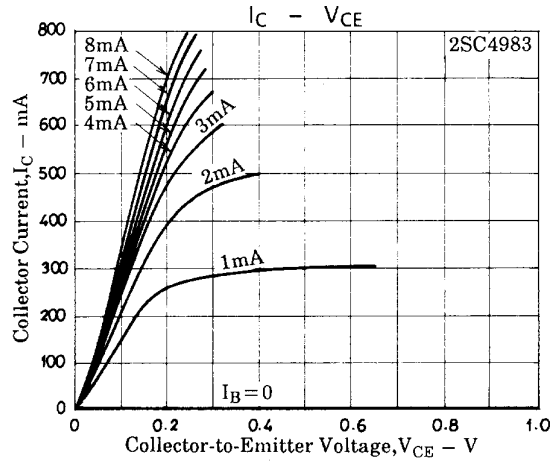
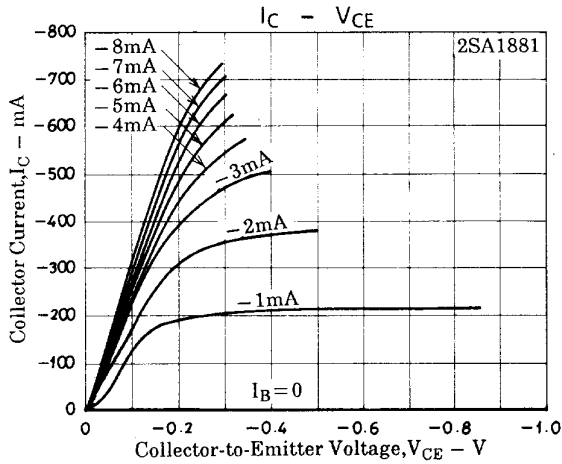
2SA1881/2SC4983

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

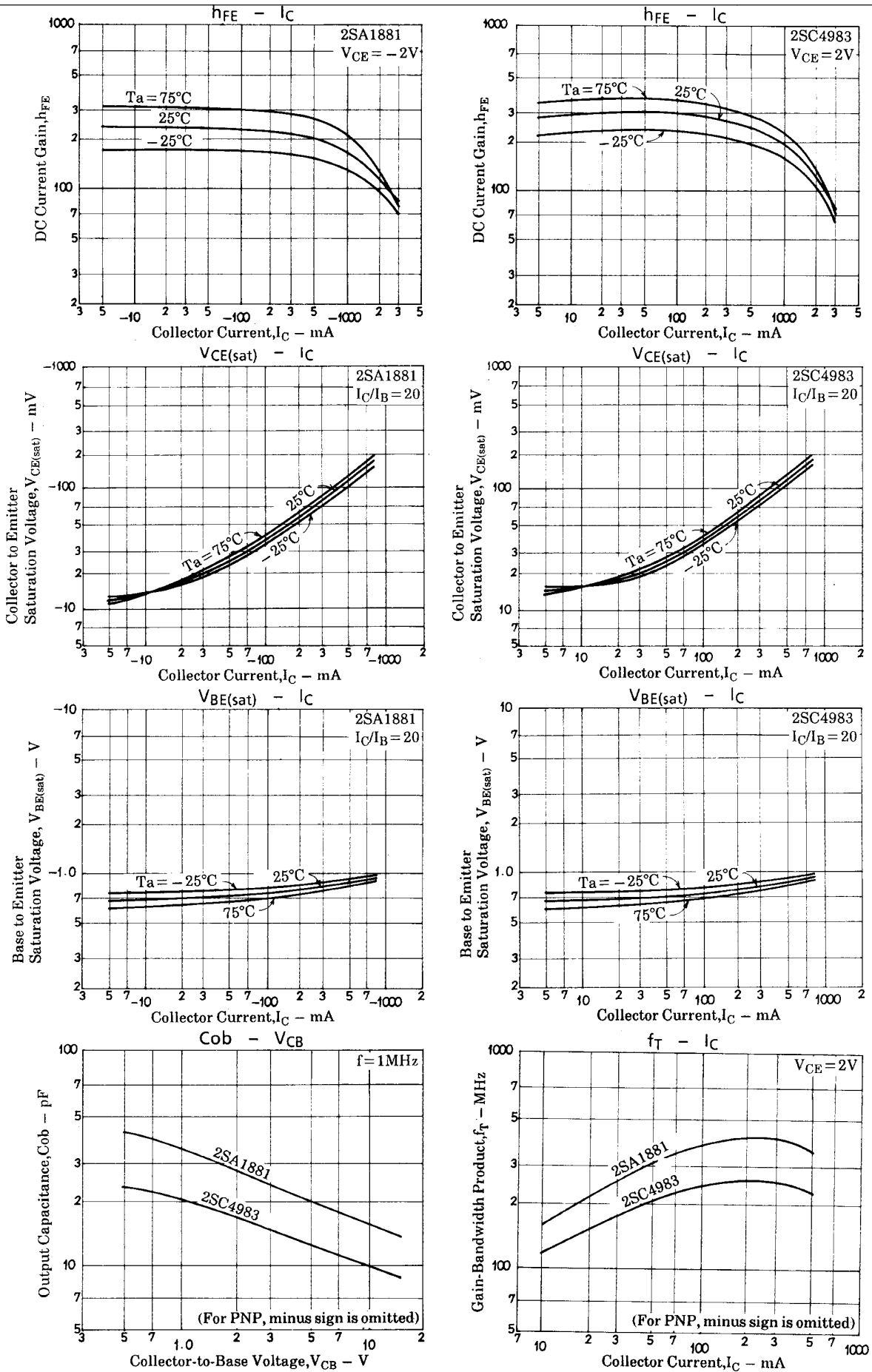
* : The 2SA1881/2SC4983 are classified by 50mA h_{FE} as follows :

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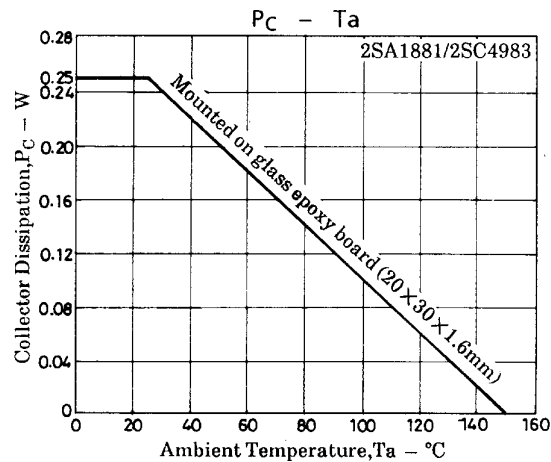
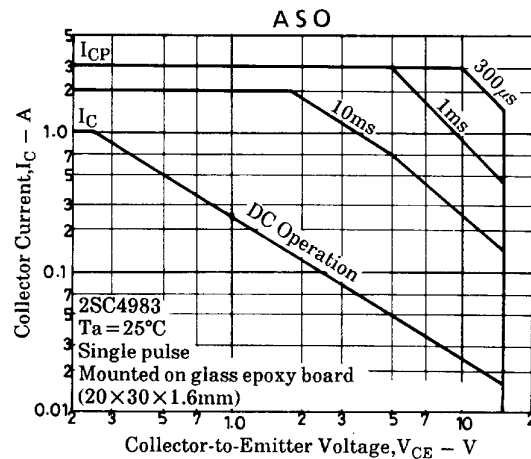
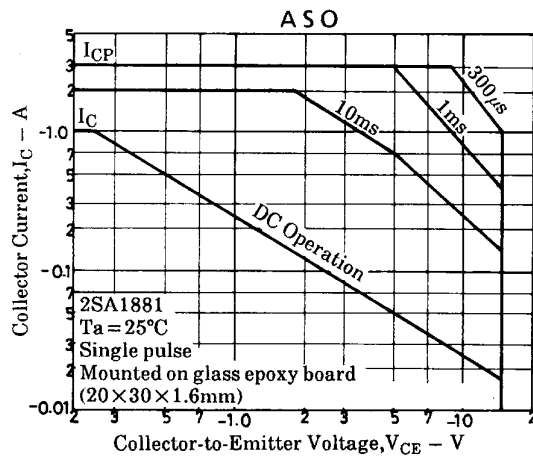
Marking : 2SA1881 : IS
2SC4983 : KN



2SA1881/2SC4983



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