

No.4661

PNP/NPN Epitaxial Planar Silicon Transistors

Low-Frequency General-Purpose Amp Applications

Applications

· AF power amp, 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 sets to be made smaller and slimmer.

():2SA1881

Absolute Maximum Ratings	at $Ta = 25$ °C			unit	
Collector-to-Base Voltage	$ m v_{CBO}$		(-)15	V	
Collector-to-Emitter Voltage	V_{CEO}		(-)15	V	
Emitter-to-Base Voltage	V_{EBO}		(-)5	V	
Collector Current	$I_{\mathbf{C}}$		(-)1	Α	
Collector Current(Pulse)	I_{CP}		(-)3	Α	
Base Current	I_B		(-)200	mA	
Collector Dissipation	$P_{\mathbf{C}}$		250	mW	
Junction Temperature	Тj		150	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to +150	°C	
Electrical Characteristics at	Ta = 25°C	•	min typ	max	u
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)12V, I_E = 0$		-)100	1

Electrical Characteristics at	Ta = 25°C	·	min	typ max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)12V, I_E = 0$		(-)100	nA
Emitter Cutoff Current	${ m I_{EBO}}$	$V_{EB} = (-)4V, I_C = 0$		(-)100	nΑ
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)2V, I_{C} = (-)50mA$	135※	600>	K
	$h_{FE}(2)$	$V_{CE} = (-)2V_1I_C = (-)800mA$	80		
Gain-Bandwidth Product	$\mathbf{f_T}$	$V_{CE} = (-)2V, I_{C} = (-)50mA$	(300)200	MHz
C-E Saturation Voltage	$V_{CE(sat)}(1)$	$I_C = (-)5mA, I_B = (-)0.5mA$	(.	-)10 (-)25	mV
	$V_{\mathrm{CE(sat)}}(2)$	$I_C = (-)500 \text{mA}, I_B = (-)25 \text{mA}$	(-)120 (-)240	mV
B-E Saturation Voltage	$ m V_{BE(sat)}$	$I_C = (-)500 \text{mA}, I_B = (-)25 \text{mA}$	(-	-)0.9(-)1.2	V
Output Capacitance	Cob	$V_{CB} = (-)10V, f = 1MHz$	(1	5)10	pF
•	$V_{(BR)CBO}$	$I_C = (-)10 \mu A, I_E = 0$	(-)15		V
	$V_{(BR)CEO}$	$I_C = (-)1 \text{ mA, } R_{BE} = \infty$	(-)15		V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_{\rm E} = (-)10 \mu {\rm A}, I_{\rm C} = 0$	(~)5		V
C-B Breakdown Voltage C-E Breakdown Voltage E-B Breakdown Voltage	V _{(BR)CBO} V _{(BR)CEO}	$I_{C}=(-)10\mu A, I_{E}=0$ $I_{C}=(-)1mA, R_{BE}=\infty$	(-)15 (-)15	5)10	V

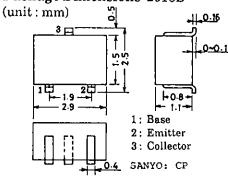
%: The 2SA1881/2SC4983 are classified by 50mA hFE as follows:

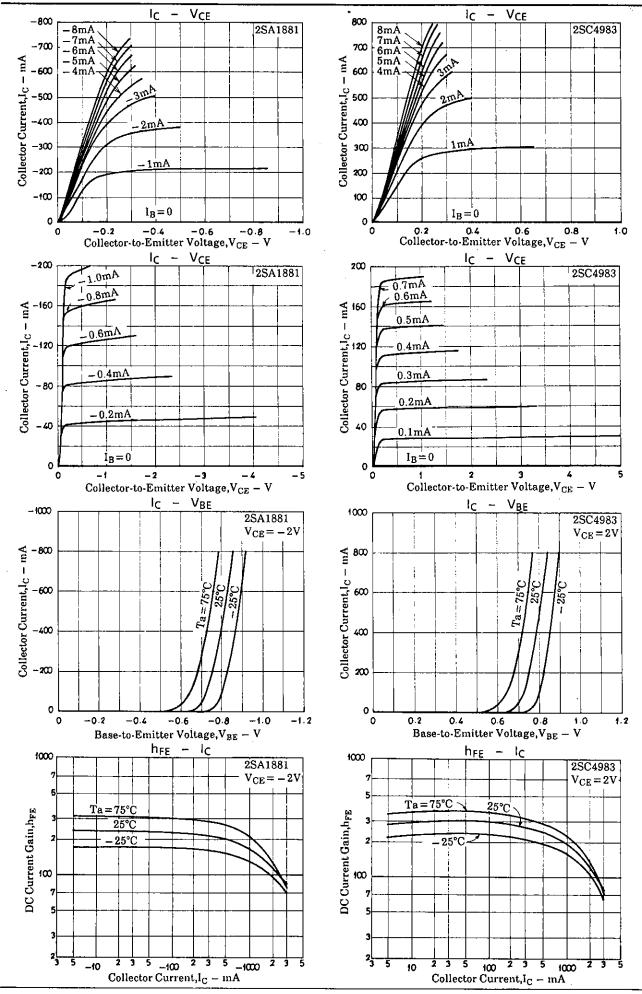
- 1			
	135 5 270	200 6 400	300 7 600

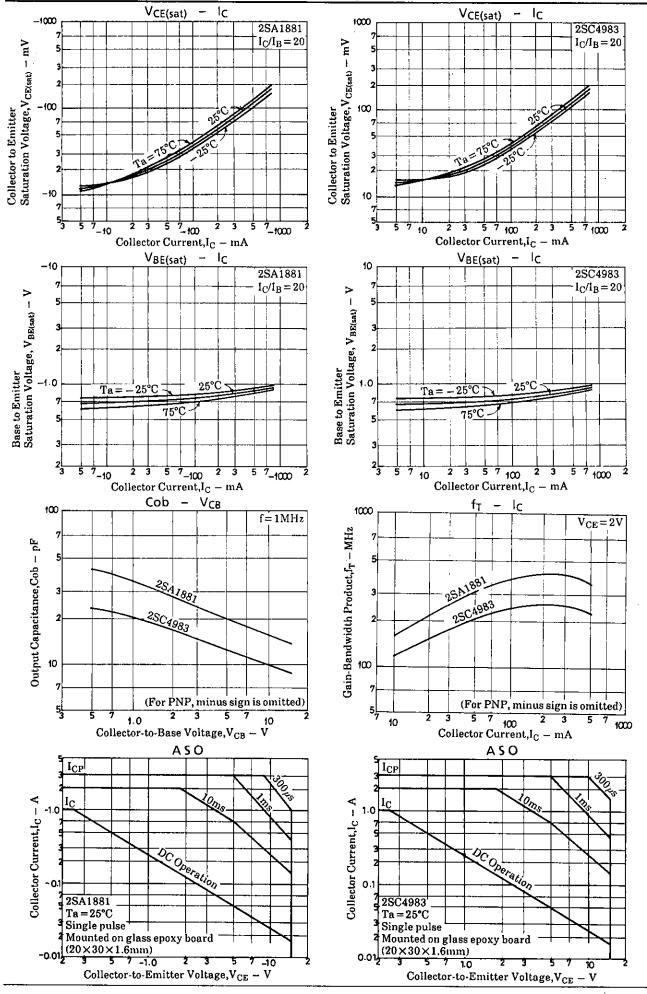
Marking: 2SA1881: IS

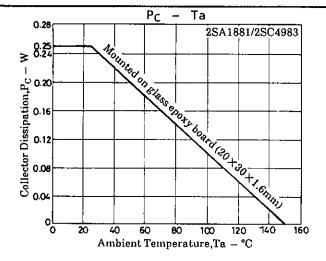
2SC4983: KN

Package Dimensions 2018B









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