PNP/NPN Epitaxial Planar Silicon Transistor



2SA1881/2SC4983

Low-Frequency General-Purpose Amplifier Applications

Features

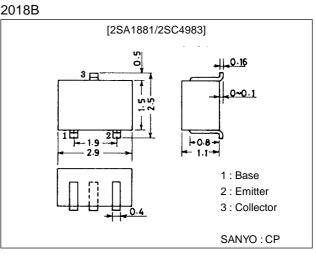
• AF power amplifier, medium-speed switching, smallsized motor drivers and LED drivers.

Features

- · Large current capacity.
- \cdot Low collector-to-emitter saturation voltage.
- · Very small-sized pakage permitting 2SA1881/
 - 2SC4983-appied set to be made smaller and slimmer.

Package Dimensions

unit:mm



():2SA1881

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	IC		(–)1	A
Collector Current (Pulse)	I _{CP}		(–)3	Α
Base Current	IB		(–)200	mA
Collector Dissipation	PC		250	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
Falanielei			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)12V, I _E =0			(–)100	nA
Emitter Cutoff Current	IEBO	V _{EB} =(-)4V, I _C =0			(–)100	nA
DC Current Gain	h _{FE} 1	V _{CE} =(-)2V, I _C =(-)50mA	135*		600*	
	h _{FE} 2	V _{CE} =(-)2V, I _C =(-)800mA	80			
Gain-Bandwidth Product	fT	V _{CE} =(-)2V, I _C =(-)50mA		(300)		MHz
				200		MHz
Output Capacitance	Cob	V _{CB} =(-)10V, f=1MHz		(15)10		pF

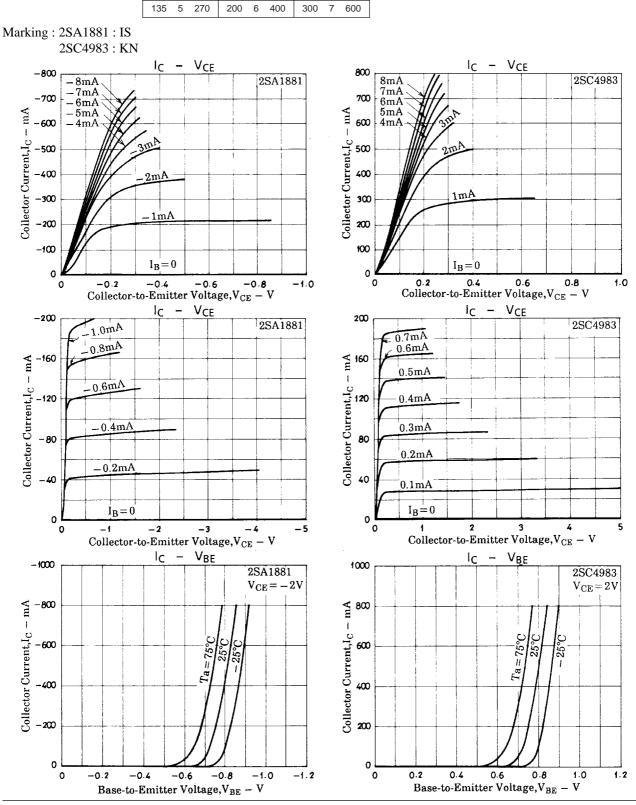
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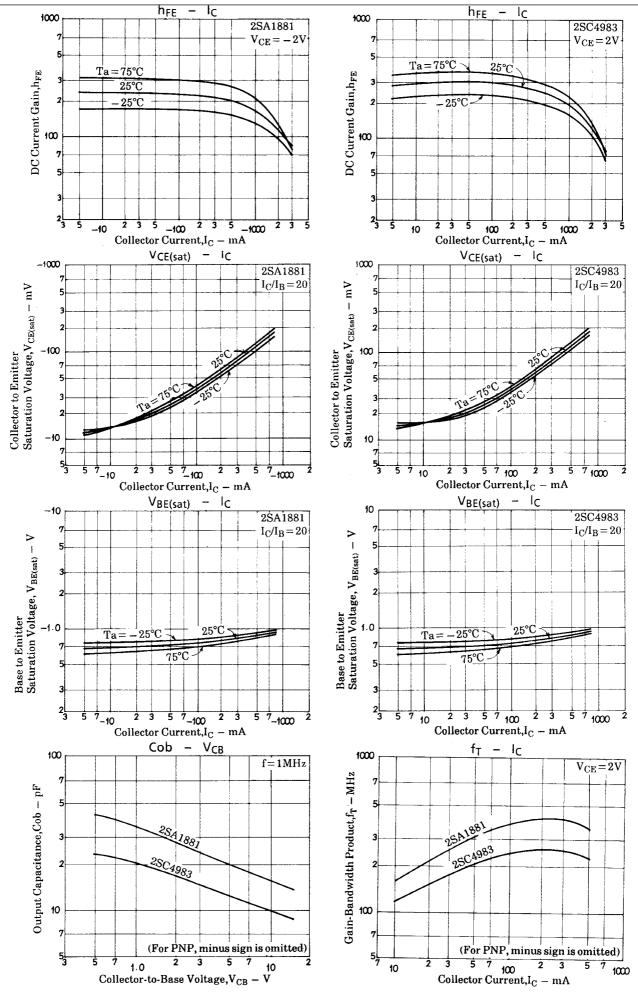
2SA1881/2SC4983

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
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 =-10μA, I _E =0	(–)15			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =−1mA, R _{BE} =∞	(–)15			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =-10μΑ, I _C =0	(–)5			V

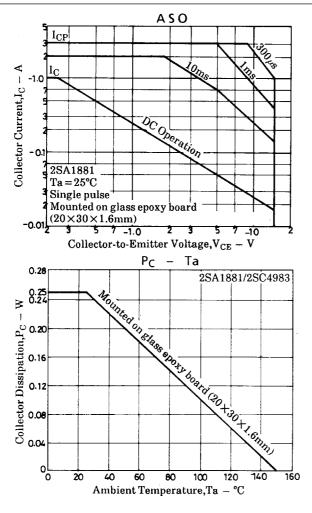
* : The 2SA1881/2SC4983 are classified by 50mA h_{FE} as follows :

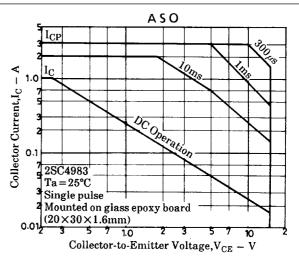


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