



2SA1703/2SC4483

Low-Frequency Amplifier, Electronic Governor Applications

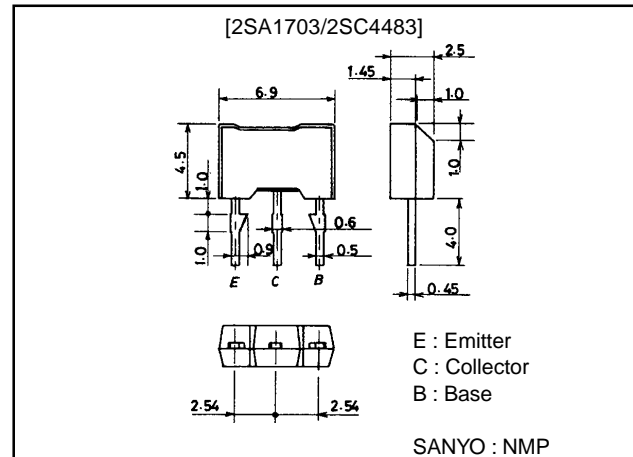
Features

- Low collector-to-emitter saturation voltage.

Package Dimensions

unit:mm

2064



() : 2SA1703

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		(-)30	V
Collector-to-Emitter Voltage	V_{CEO}		(-)25	V
Emitter-to-Base Voltage	V_{EBO}		(-)5	V
Collector Current	I_C		(-)1.5	A
Collector Current (Pulse)	I_{CP}		(-)3	A
Collector Dissipation	P_C		1	W
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}	$V_{CB}=(-)20V, I_E=0$			(-)100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$			(-)100	nA
DC Current Gain	h_{FE1}	$V_{CE}=(-)2V, I_C=(-)50mA$	100*		400*	
	h_{FE2}	$V_{CE}=(-)2V, I_C=(-)1A$	40			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)50mA$		(180)		MHz
				150		MHz

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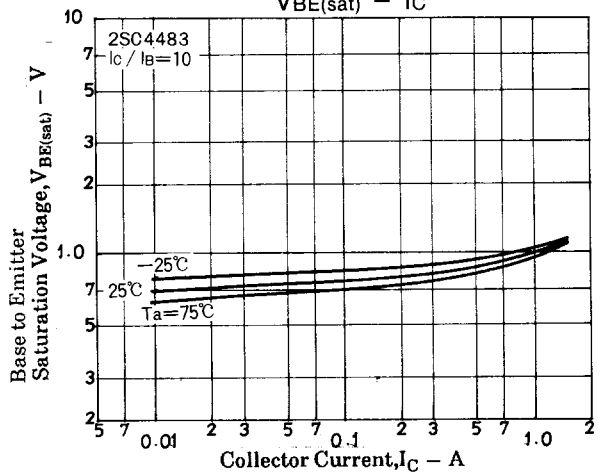
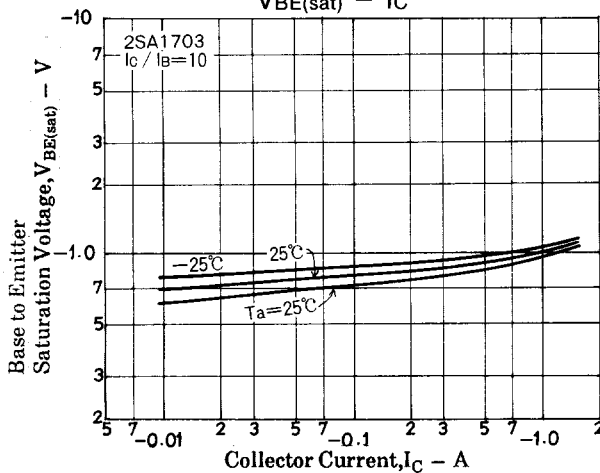
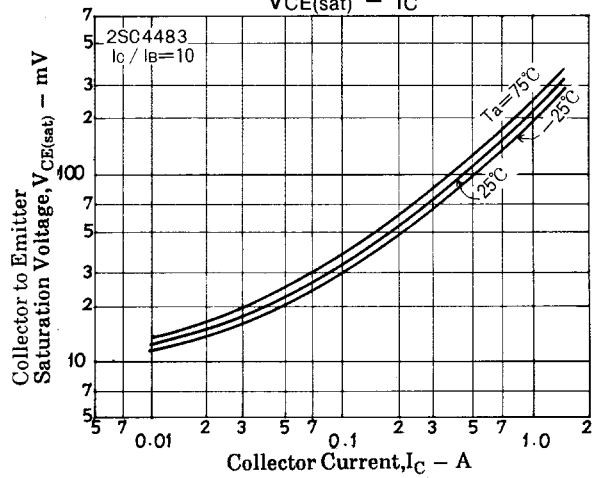
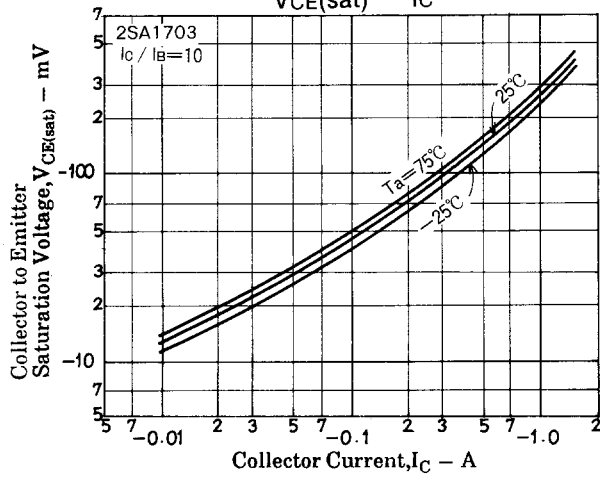
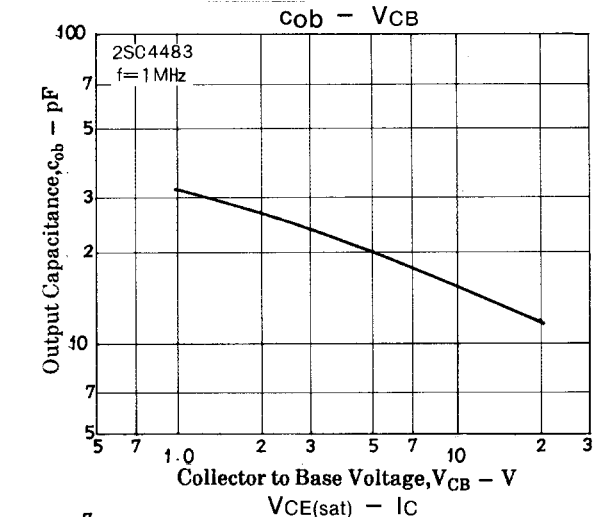
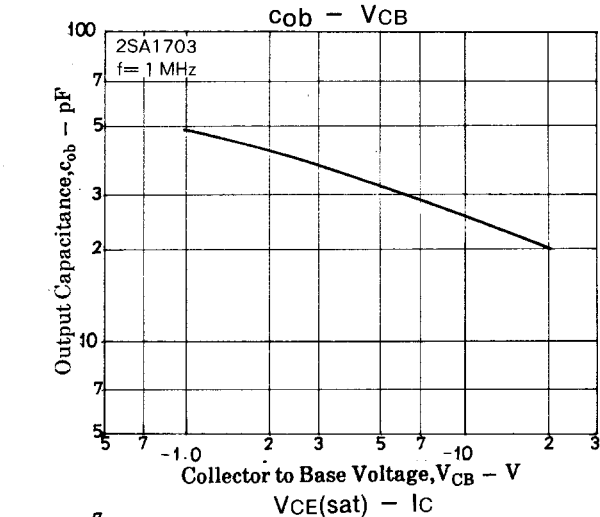
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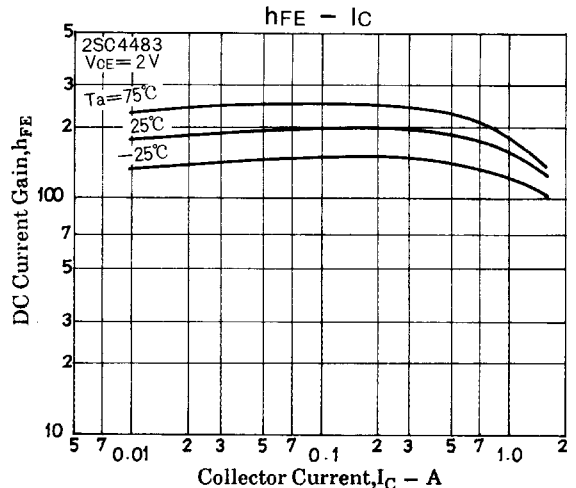
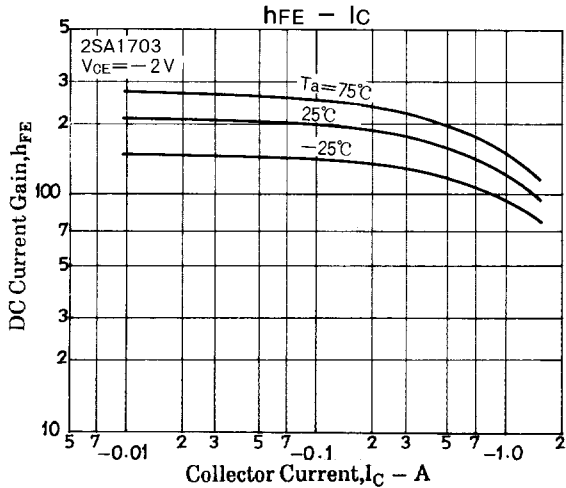
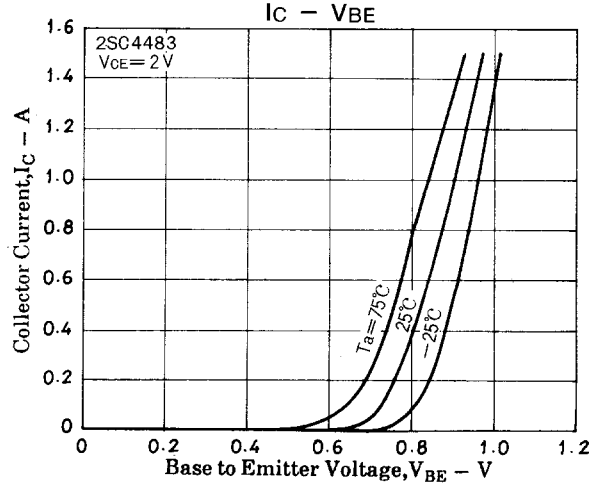
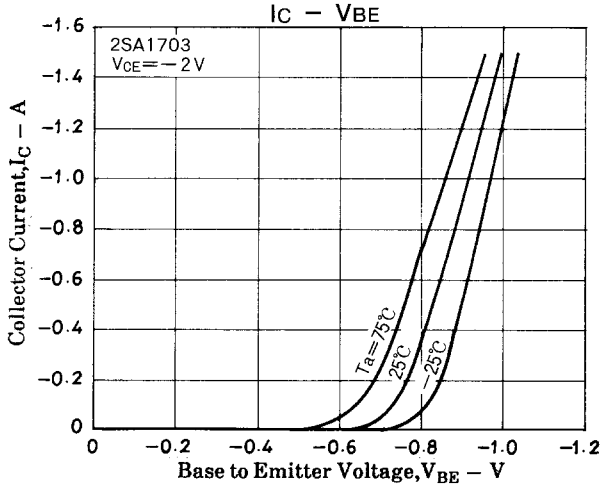
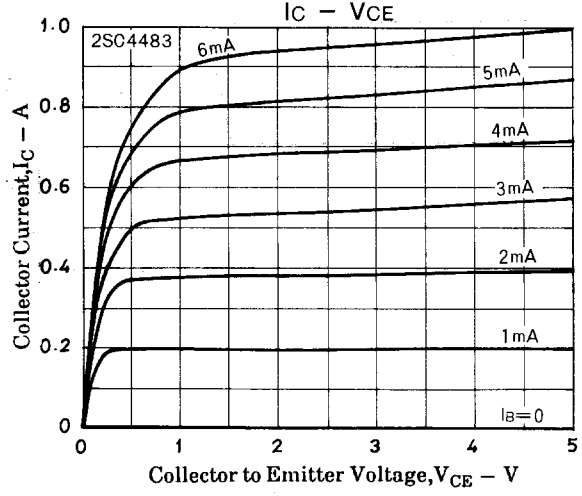
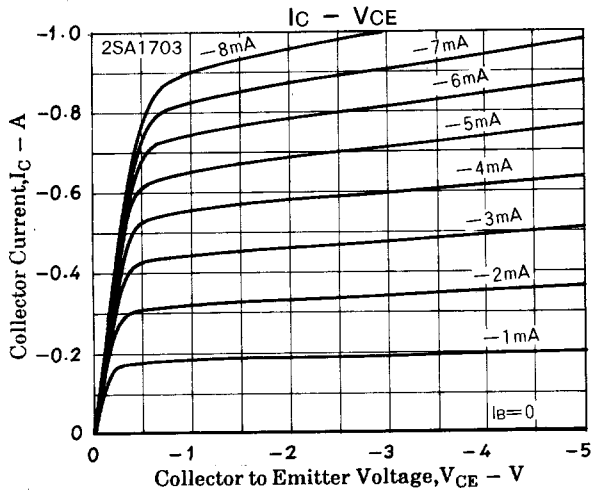
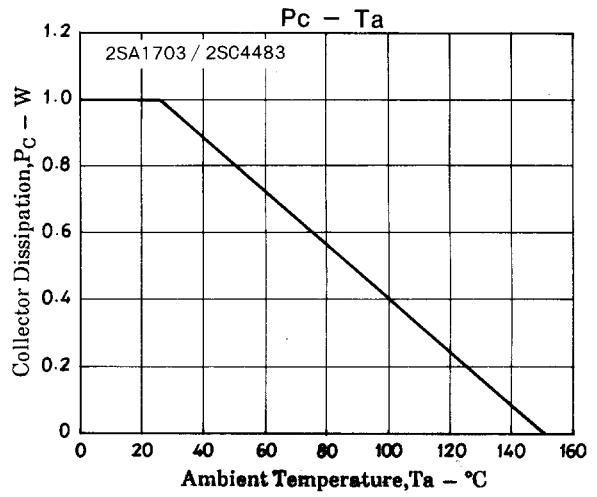
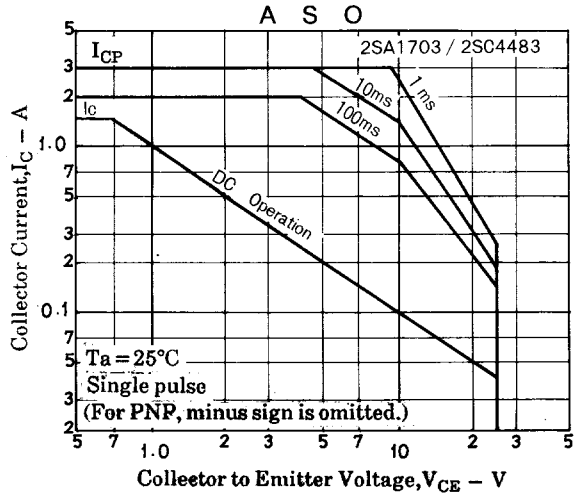
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-0.15)	(-0.5)	V
				0.12	0.3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-0.9)	(-1.2)	V
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(25)15		pF
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$		(-)30		V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$		(-)25		V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$		(-)5		V

* : The 2SA1703/2SC4483 are classified by 50mA h_{FE} as follows :

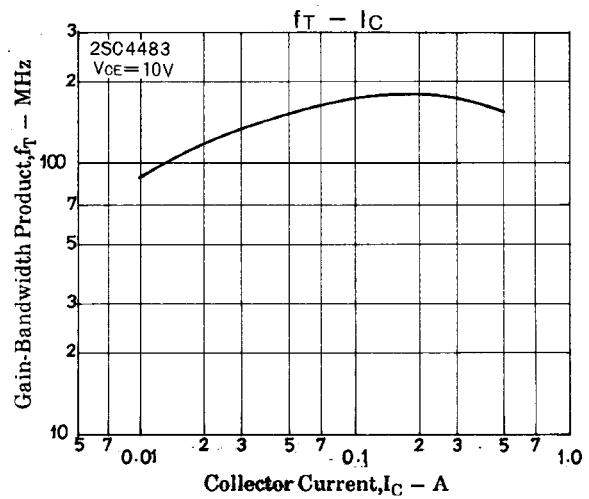
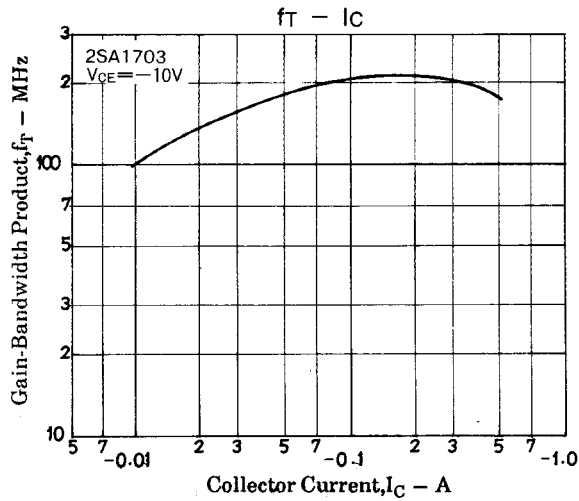
100 R	200	140 S	280	200 T	400
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