Ordering number:EN3023

PNP/NPN Epitaxial Planar Silicon Transistor

2SA1703/2SC4483

Low-Frequency Amplifier, Electronic Governor Applications

Features

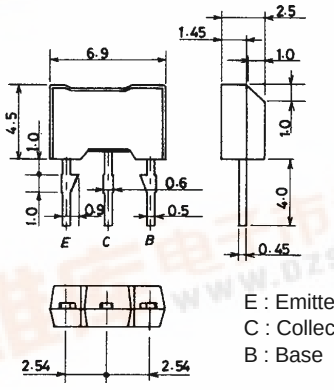
· Low collector-to-emitter saturation voltage.

Package Dimensions

unit:mm

2064

[2SA1703/2SC4483]



E : Emitter
C : Collector
B : Base

SANYO : NMP

( ) : 2SA1703

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(–)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	Tj		150	˚C
Storage Temperature	Tstg		–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	$h_{FE}1$	V_{CE}=(–)2V, I_C=(–)50mA	100*		400*	
	$h_{FE}2$	V_{CE}=(–)2V, I_C=(–)1A	40			
Gain-Bandwidth Product	f_T	V_{CE}=(–)10V, I_C=(–)50mA		(180)		MHz
				150		MHz

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters
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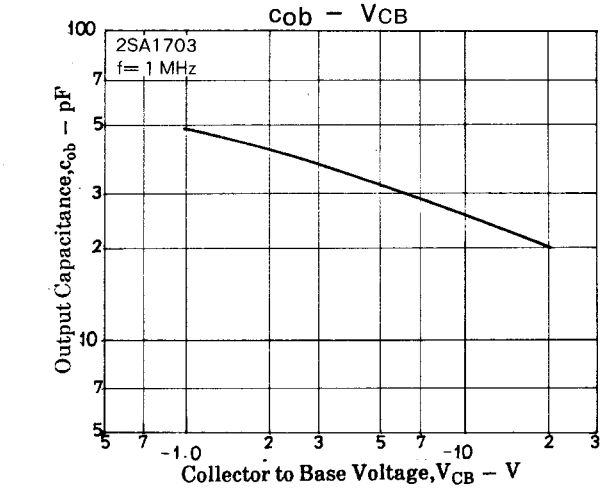
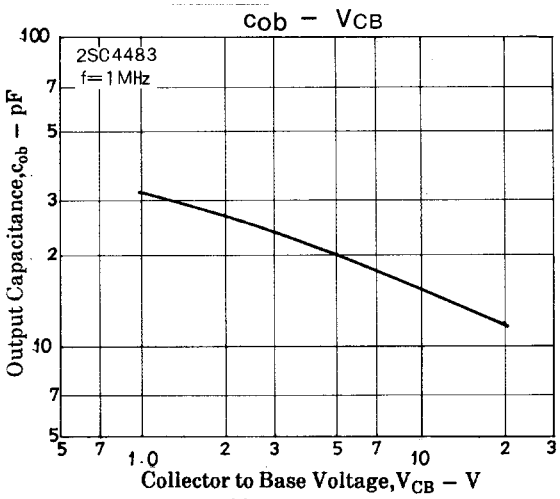
2SA1703/2SC4483

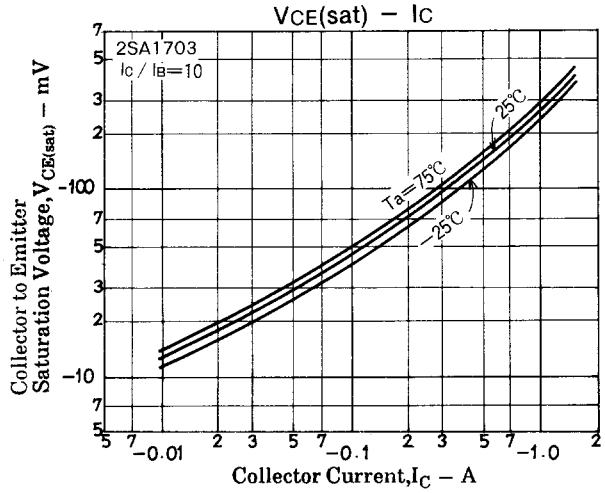
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=(–)500mA, I_B=(–)50mA		(–0.15)	(–0.5)	V
				0.12	0.3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=(–)500mA, I_B=(–)50mA		(–)0.9	(–)1.2	V
Output Capacitance	C_{ob}	V_{CB}=(–)10V,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

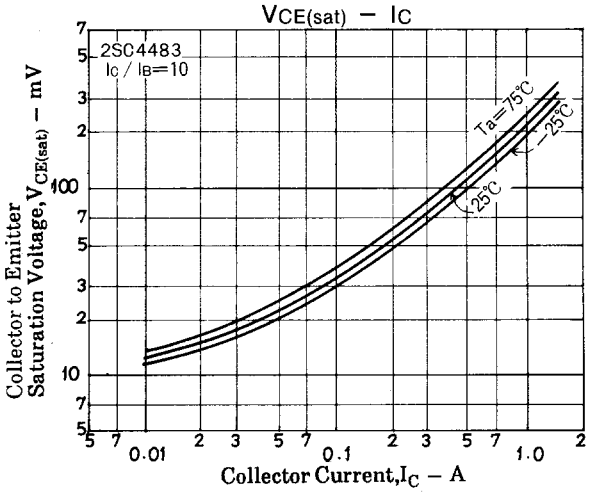
* : The 2SA1703/2SC4483 are classified by 50mA h_{FE} as follows :

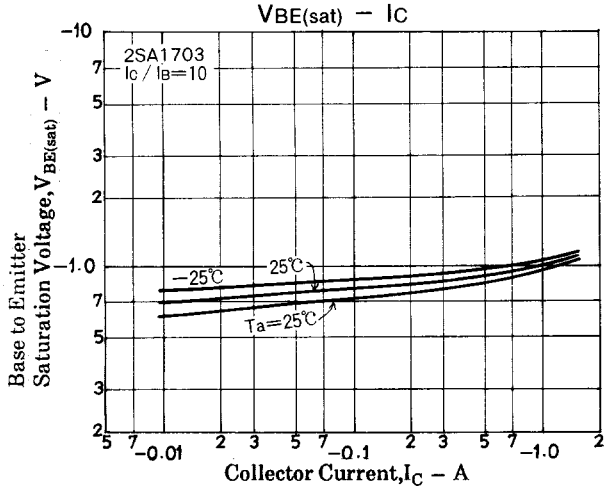
100 R 200	140 S 280	200 T 400

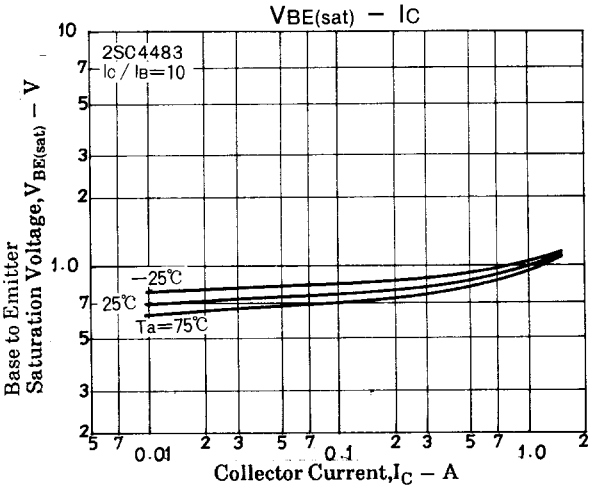




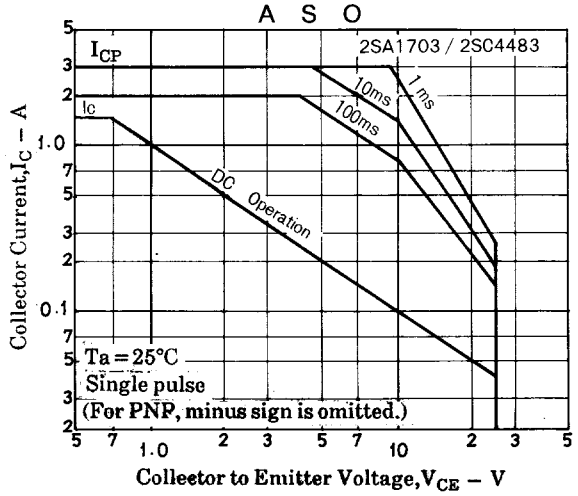




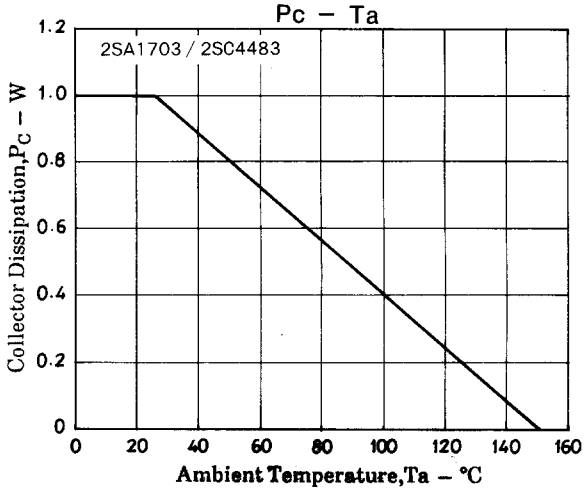




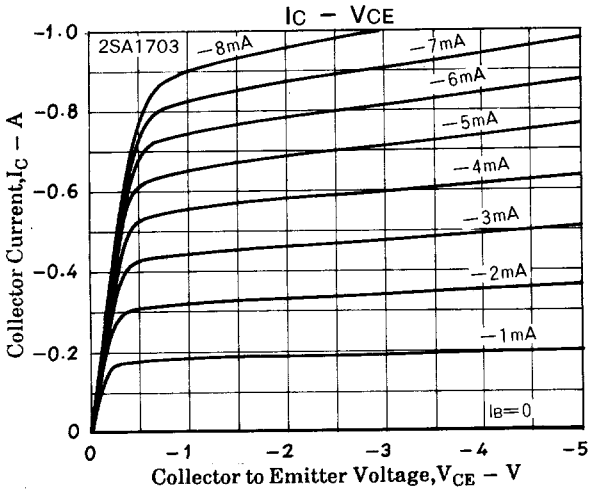
A S O



Pc – Ta



IC – VCE



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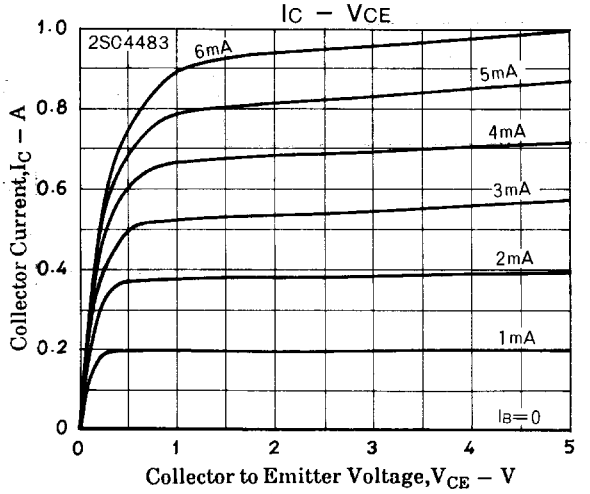
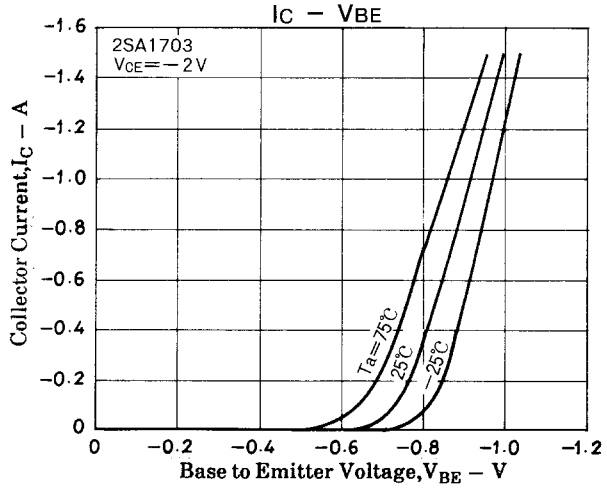


IC – VBE



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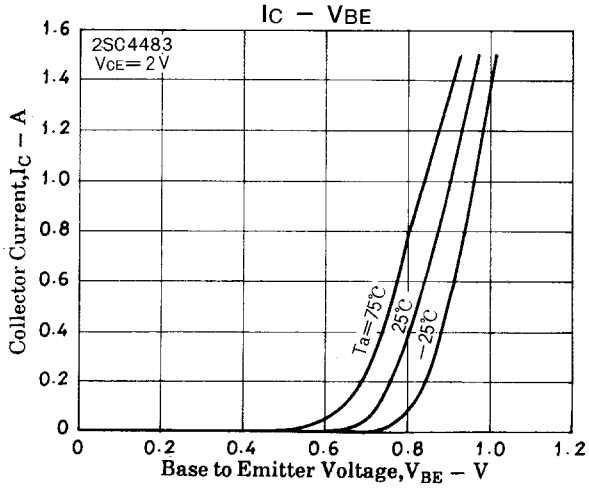
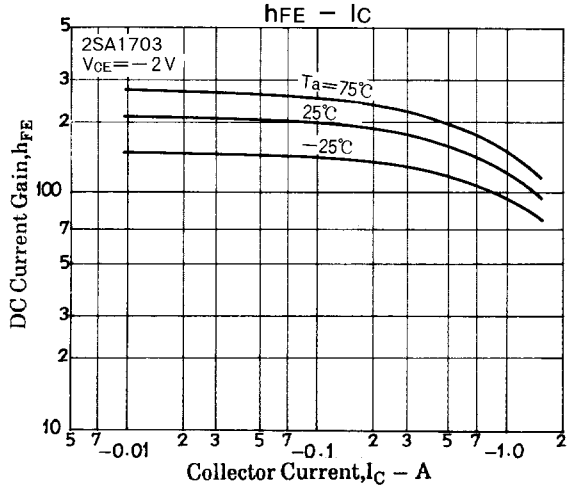


hFE – IC



hFE – IC