

SANYO	No.1023C	2SB893
		PNP Epitaxial Planar Silicon Transistor

Large-Current Driving Applications

Applications

- Power supplies, relay drivers, lamp drivers, strobes

Features

- Low saturation voltage: $V_{CE(sat)} \leq -0.45V (I_C = -1.5A, I_B = -0.15A)$
- Large current capacity and wide ASO: $I_{Cmax} = -2.5A$

Absolute Maximum Ratings at $T_a = 25^\circ C$

			unit
Collector to Base Voltage	V_{CBO}	-20	V
Collector to Emitter Voltage	V_{CEO}	-10	V
Emitter to Base Voltage	V_{EBO}	-7	V
Collector Current	I_C	-2.5	A
Collector Current(Pulse)	I_{CP}	-5	A
Collector Dissipation	P_C	0.75	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

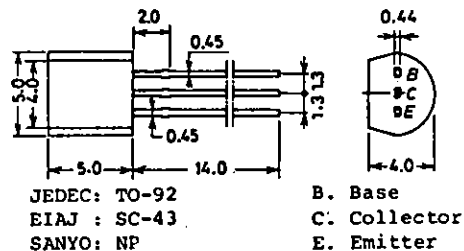
Electrical Characteristics at $T_a = 25^\circ C$

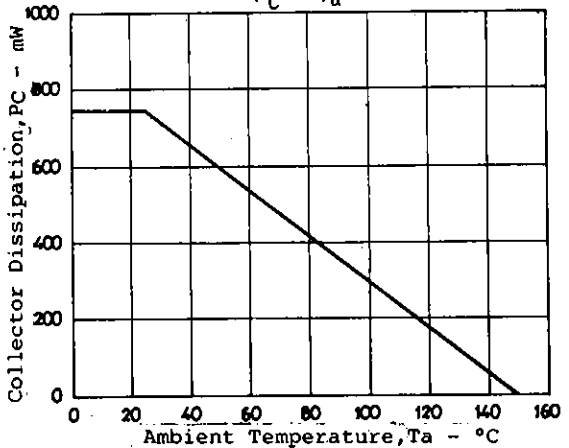
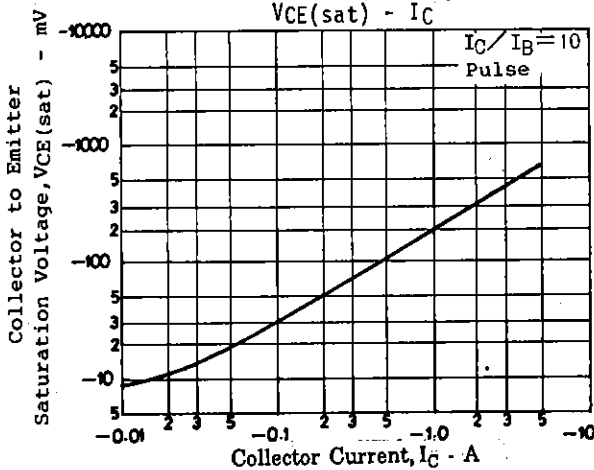
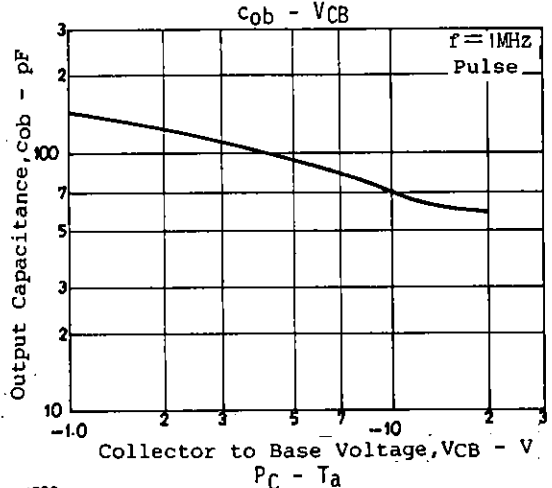
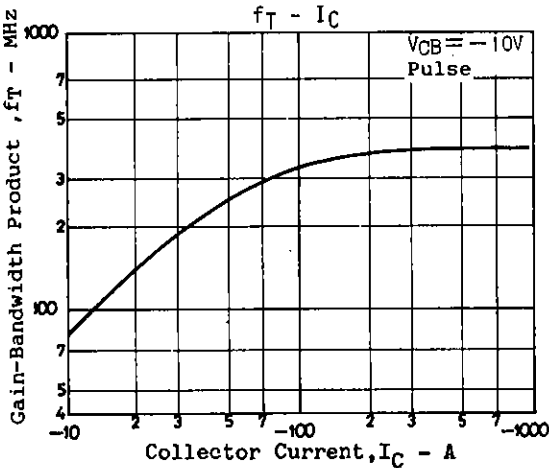
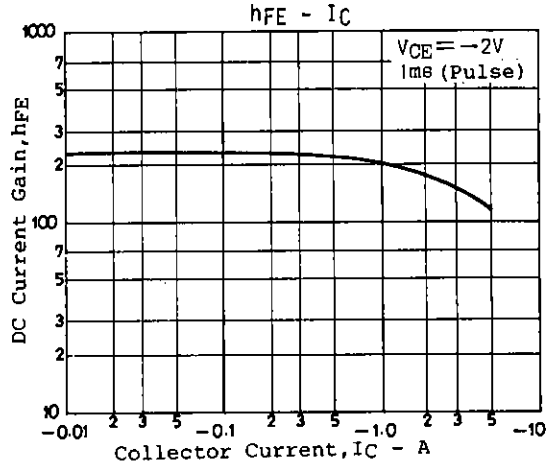
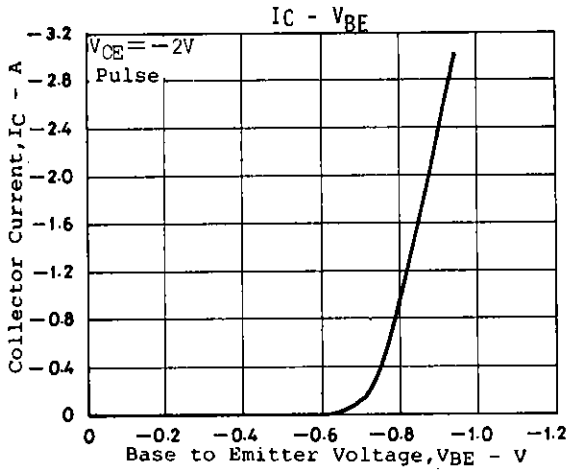
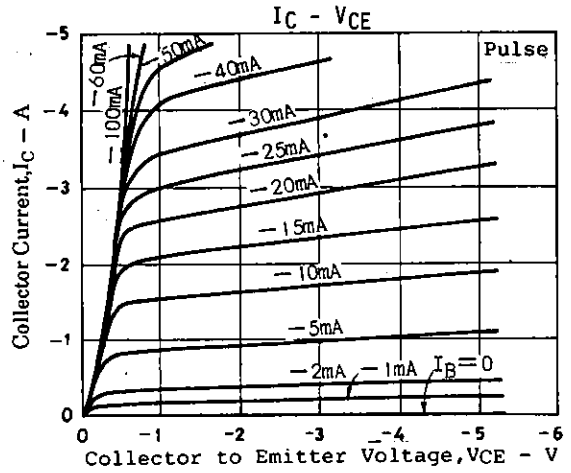
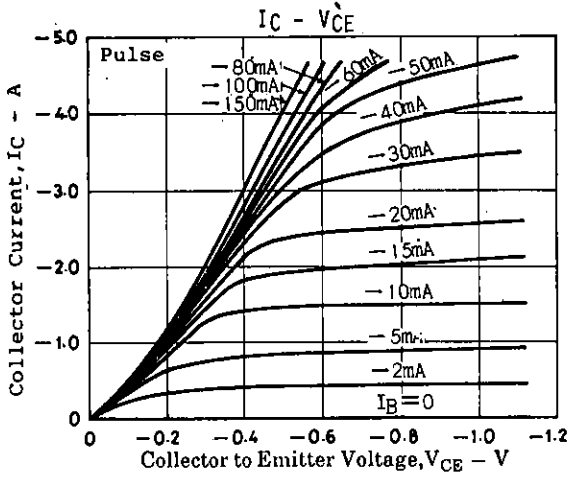
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = -2V, I_C = -500mA$	100*		560*	
	$h_{FE}(2)$	$V_{CE} = -2V, I_C = -3A, \text{pulse}$	70			
Gain-Bandwidth Product	f_T	$V_{CE} = -10V, I_C = -50mA$		250		MHz
Output Capacitance	c_{ob}	$V_{CB} = -10V, f = 1MHz$		70		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.5A, I_B = -0.15A$		-0.25	-0.45	V
C-B Breakdown Voltage	$V(BR)_{CBO}$	$I_C = -10\mu A, I_E = 0$	-20			V
C-E Breakdown Voltage	$V(BR)_{CEO}$	$I_C = -1mA, R_{BE} = \infty$	-10			V
E-B Breakdown Voltage	$V(BR)_{EBO}$	$I_E = -10\mu A, I_C = 0$	-7			V

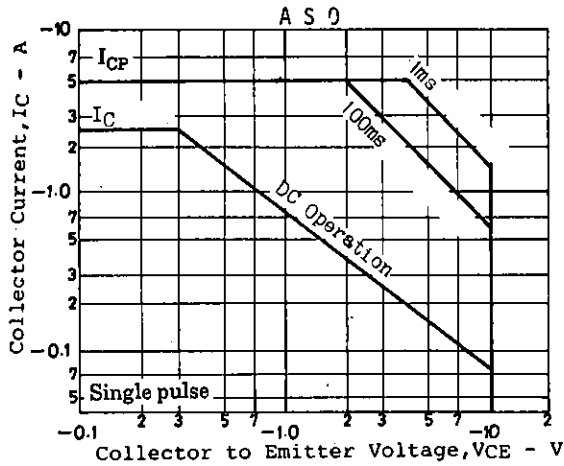
*The 2SB893 is classified by 500mA h_{FE} as follows:

100	E	200	160	F	320	280	G	560
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Package Dimensions 2003A
(unit: mm)







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