

<b>SANYO</b>	No.1023C	<b>2SB893</b>
		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	$^\circ C$

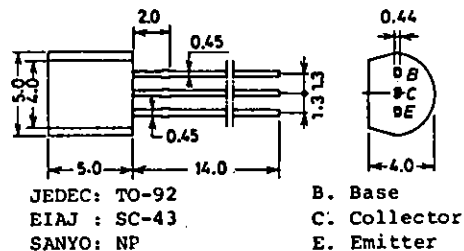
**Electrical Characteristics at  $T_a = 25^\circ C$**

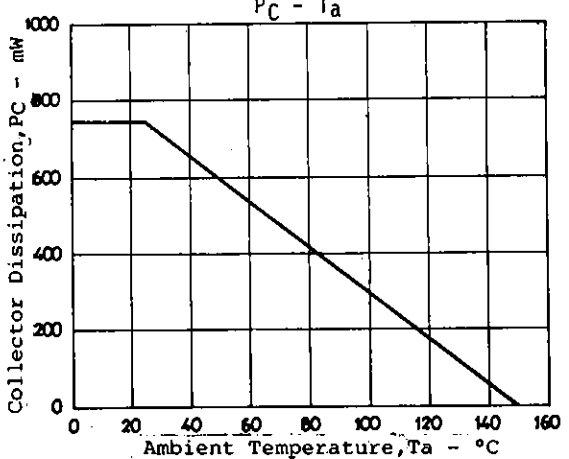
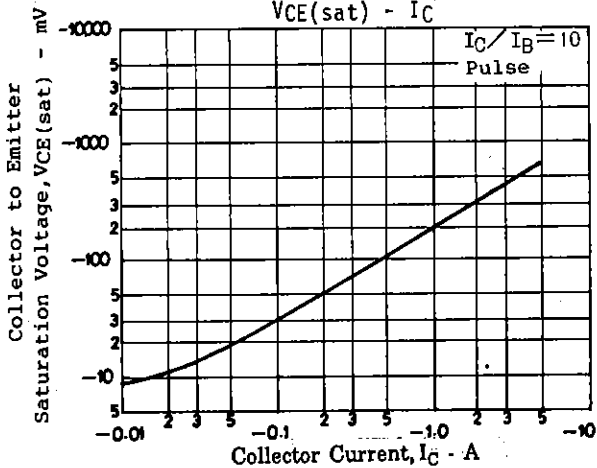
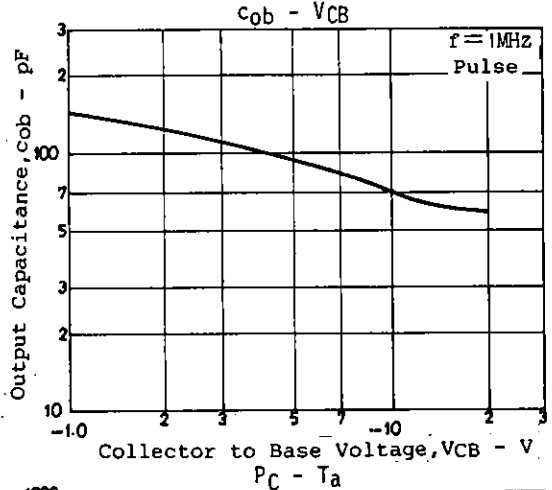
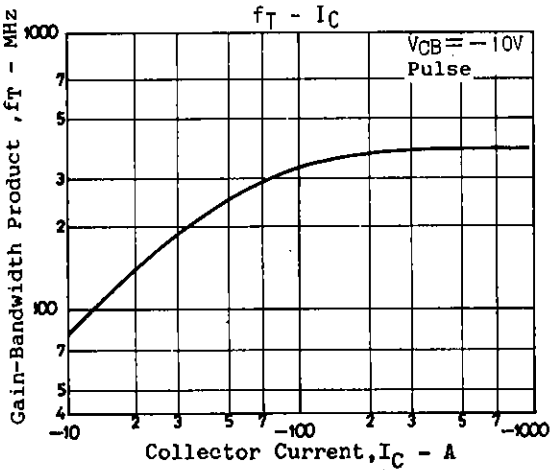
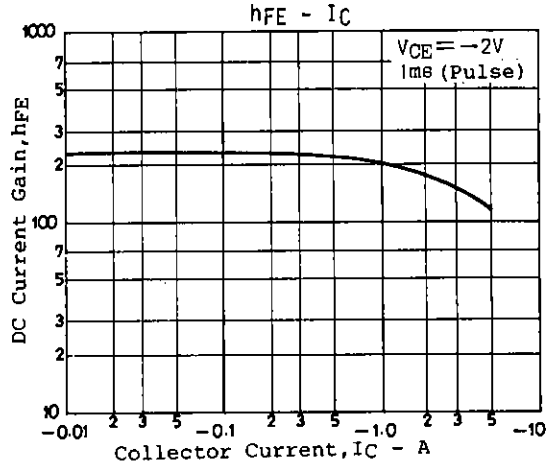
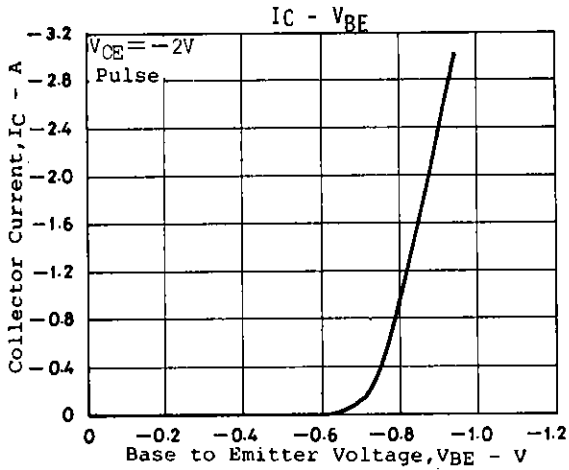
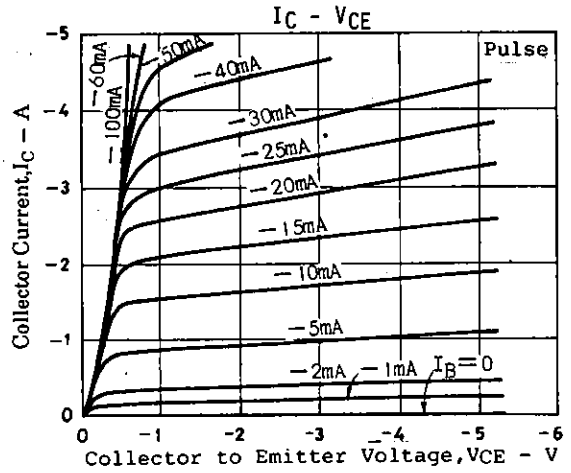
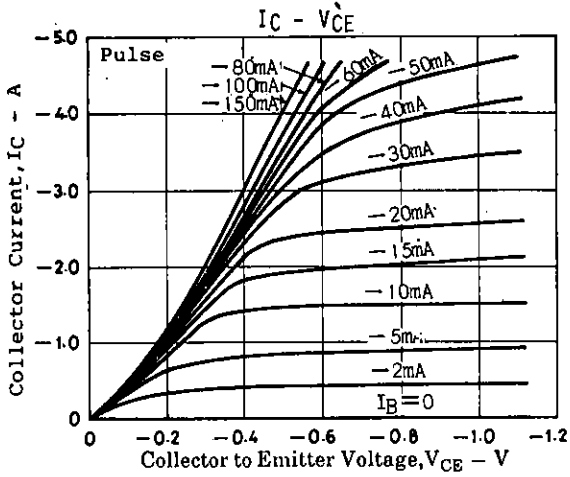
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$			-1.0	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$			-1.0	$\mu A$
DC Current Gain	$h_{FE}(1)$	$V_{CE} = -2V, I_C = -500mA$	100*		560*	
	$h_{FE}(2)$	$V_{CE} = -2V, I_C = -3A, \text{pulse}$	70			
Gain-Bandwidth 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

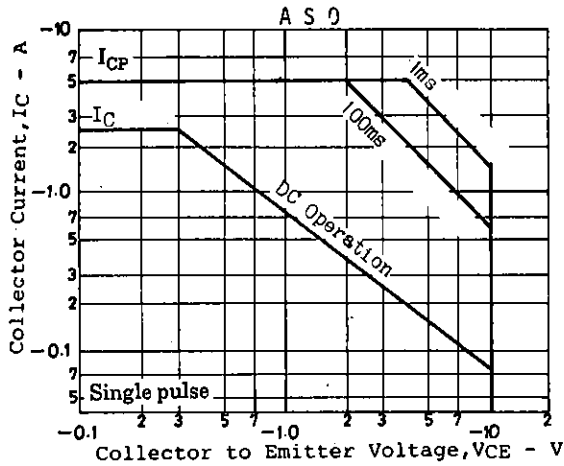
\*The 2SB893 is classified by 500mA  $h_{FE}$  as follows:

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







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