

<b>SANYO</b>	No. 4660A	<b>2SA1883</b>
		PNP Epitaxial Planar Silicon Transistor
		<b>High-Speed Switching Applications</b>

**Features**

- Fast switching speed.
- Low collector saturation voltage.
- High gain-bandwidth product.
- Small collector capacitance.
- Very small-sized package permitting 2SA1883-applied sets to be made small and slim.
- Complementary pair with the 2SC4987.

**Absolute Maximum Ratings at Ta = 25°C**

			unit
Collector to Base Voltage	V <sub>CB0</sub>	-15	V
Collector to Emitter Voltage	V <sub>CE0</sub>	-15	V
Emitter to Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>C</sub>	-200	mA
Collector Current(Pulse)	I <sub>CP</sub>	-500	mA
Base Current	I <sub>B</sub>	-40	mA
Collector Dissipation	P <sub>C</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

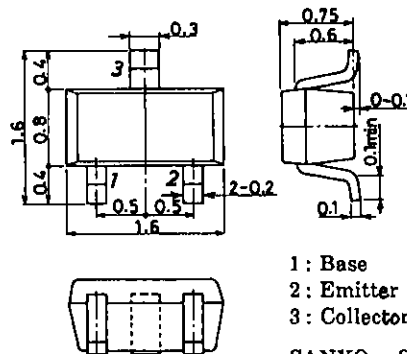
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> = -8V, I <sub>E</sub> = 0			-0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = -3V, I <sub>C</sub> = 0			-0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -10mA	50	80	140	
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -10mA	450	1000		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -5V, f = 1MHz		1.8	3.0	pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> = -1mA		-0.07	-0.20	V
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> = -1mA		-0.80	-0.90	V
C-B Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> = 0	-15			V
C-E Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -1mA, R <sub>BE</sub> = ∞	-15			V
E-B Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = -10μA, I <sub>C</sub> = 0	-5			V
Turn-ON Time	t <sub>on</sub>	See specified Test Circuit.		11		ns
Storage Time	t <sub>stg</sub>	∞		21		ns
Turn-OFF Time	t <sub>off</sub>	∞		19		ns

Marking : HA

**Package Dimensions 2106A**

(unit : mm)

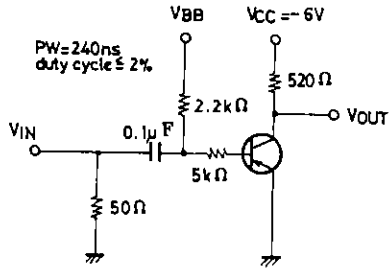
**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

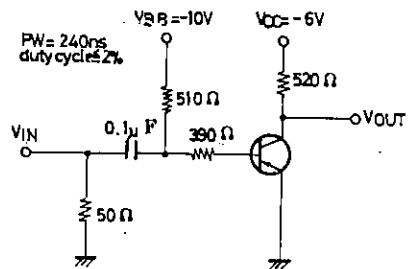
81094MT BX-1673, BX-0842 No.4660-1/4

Switching Time Test Circuit

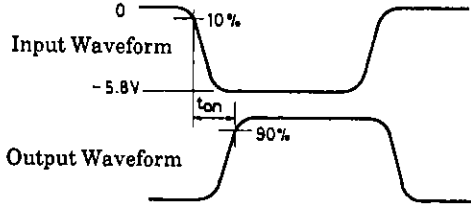
$t_{on}, t_{off}$  Test Circuit



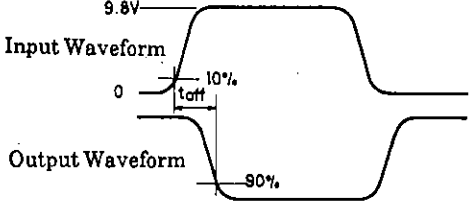
$t_{stg}$  Test Circuit



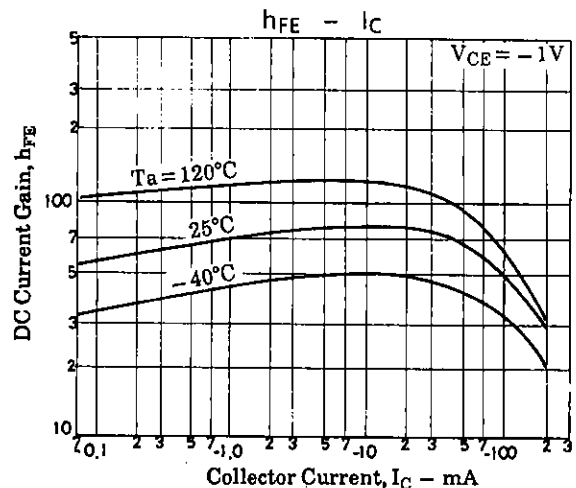
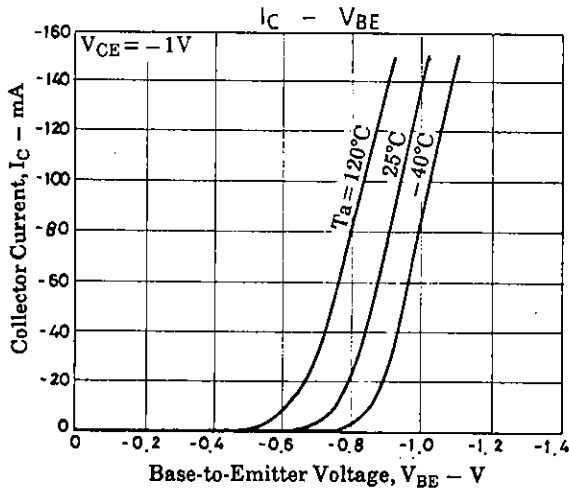
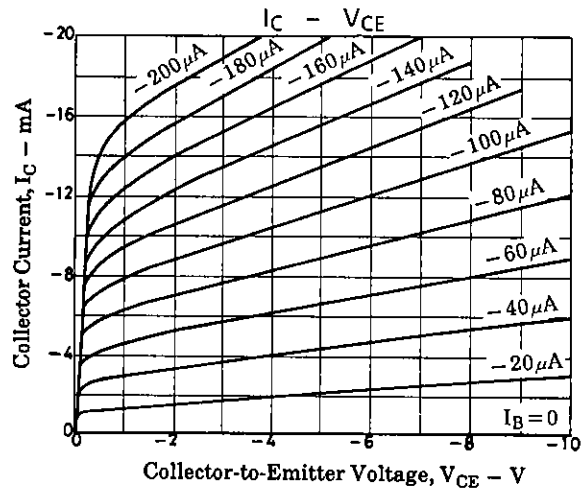
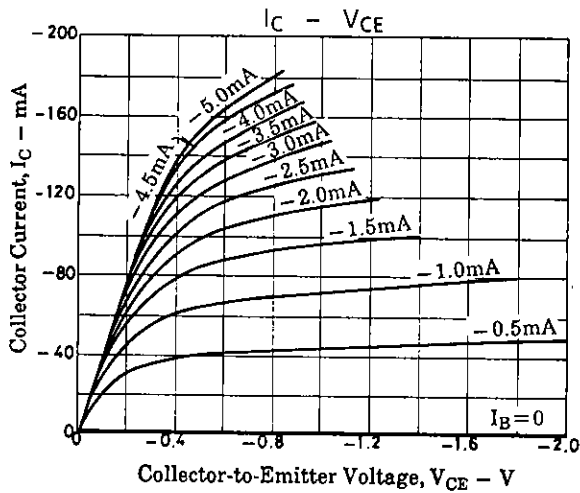
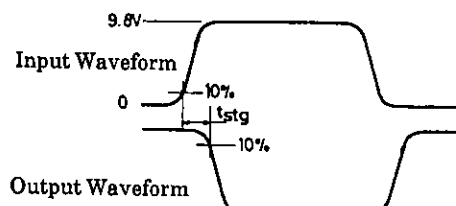
$t_{on}$  Test Waveform ( $V_{BB} = GND$ )

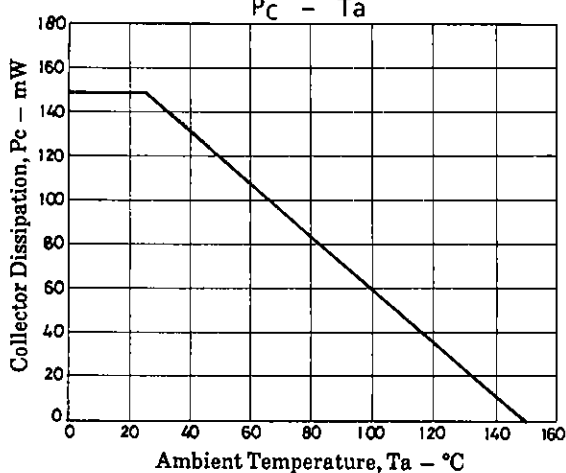
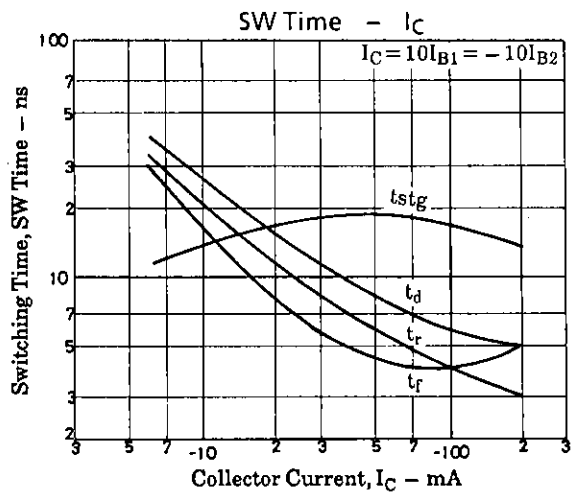
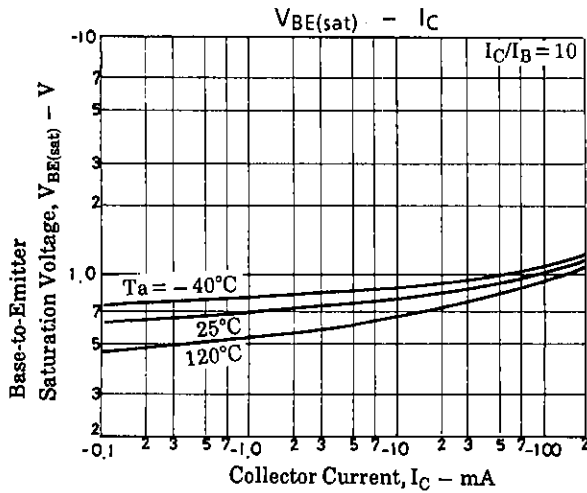
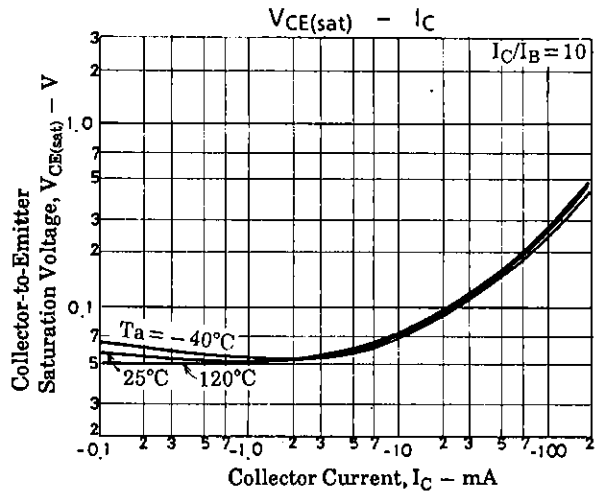
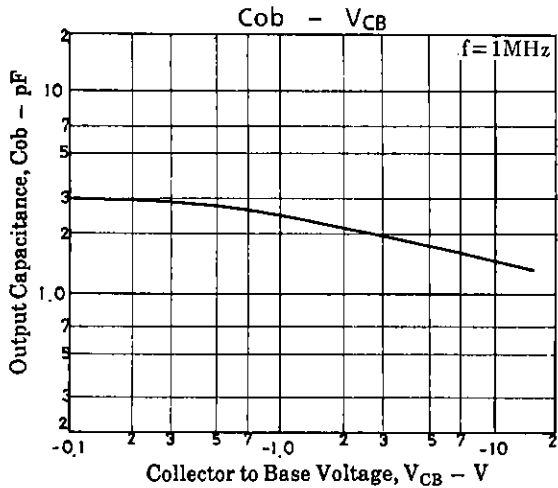
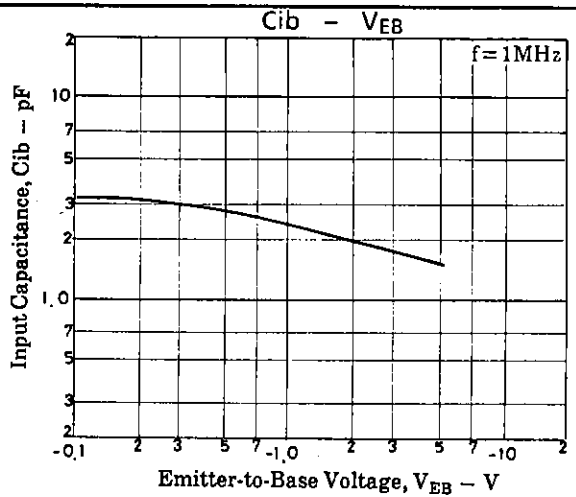
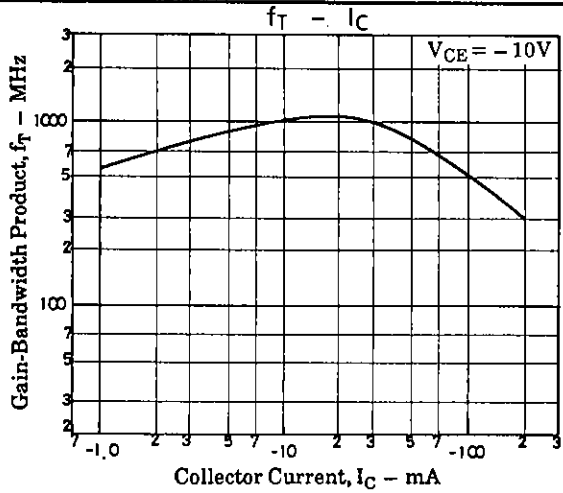


$t_{off}$  Test Waveform ( $V_{BB} = -8.0V$ )



$t_{stg}$  Test Waveform





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