

SANYO	No.1312B	2SC3176
		NPN Epitaxial Planar Silicon Transistor CRT Horizontal Deflection Output Applications (with Damper Diode)

Features

- Fast switching speed.
- Especially suited for use in high-definition CRT display ($V_{CC} = 12$ to $24V$).
- Wide ASO.

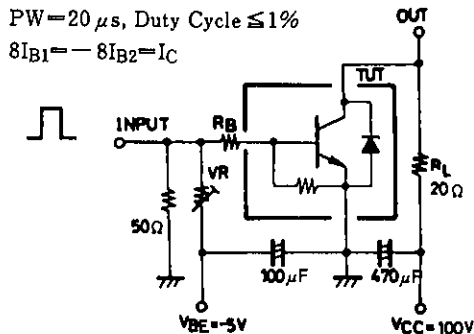
Absolute Maximum Ratings at $T_a = 25^\circ C$

			unit
Collector-to-Base Voltage	V_{CB0}	400	V
Collector-to-Emitter Voltage	V_{CEO}	200	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	7	A
Collector Current (Pulse)	I_{CP}	12	A
Base Current	I_B	4	A
Collector Dissipation	P_C	50	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

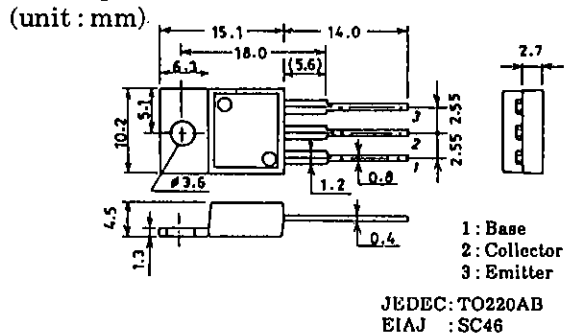
Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 200V, I_E = 0$			100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 6V, I_C = 0$			400	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 1V, I_C = 1A$	15			
	$h_{FE(2)}$	$V_{CE} = 1V, I_C = 5A$	8		40	
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.5A$	10	40		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 5A, I_B = 0.65A$			1	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 5A, I_B = 0.65A$			1.3	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	400			V
Diode Forward Voltage	V_F	$I_F = 5A$			1.5	V
Fall Time	t_f	$I_C = 5A, I_{B1} = -I_{B2} = 0.625A$			0.5	μs

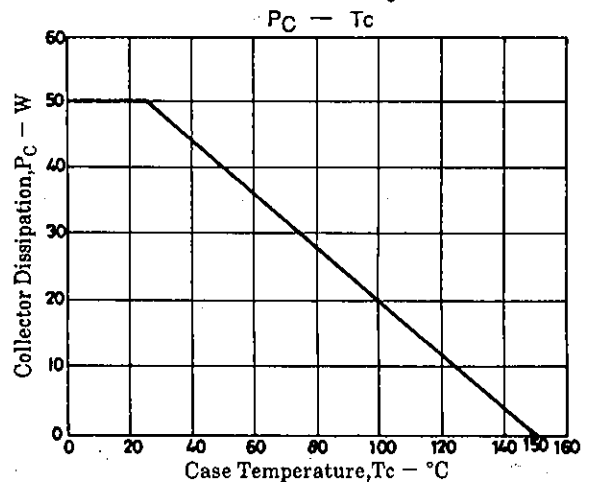
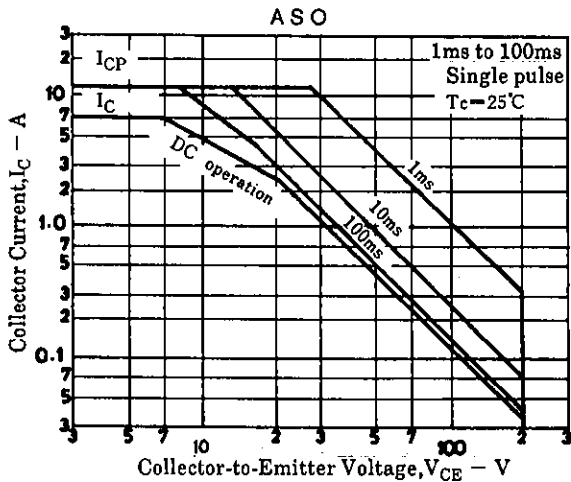
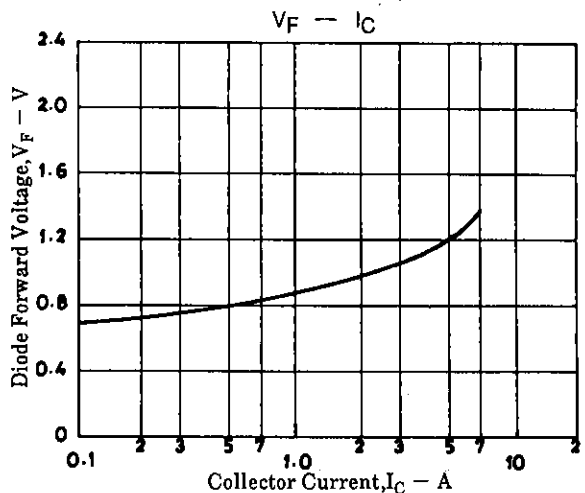
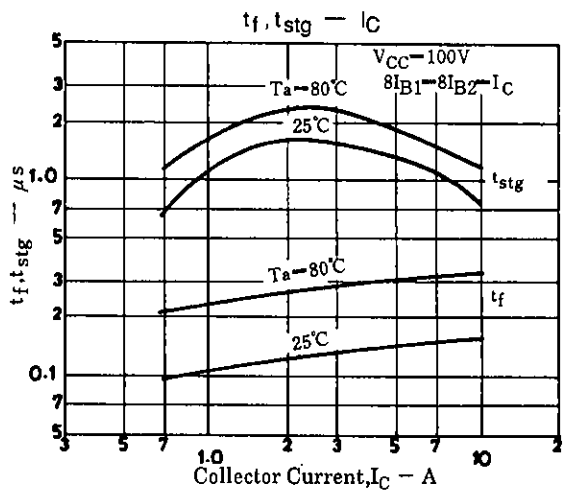
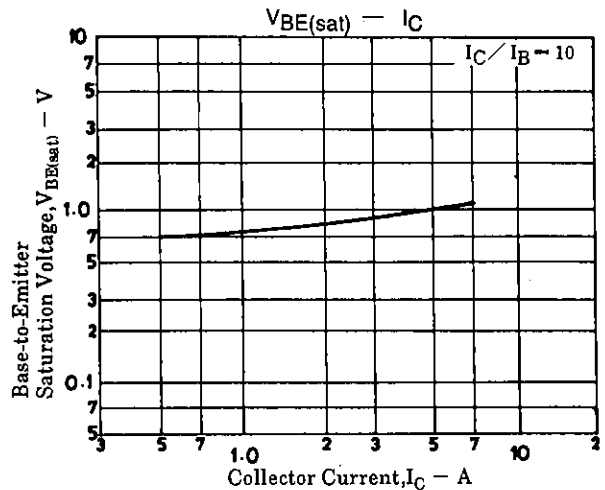
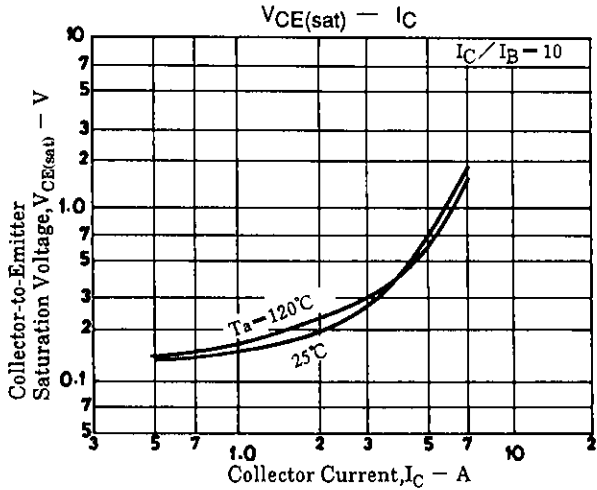
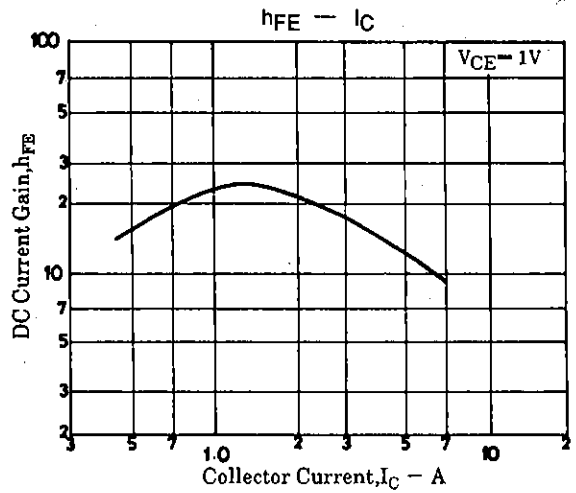
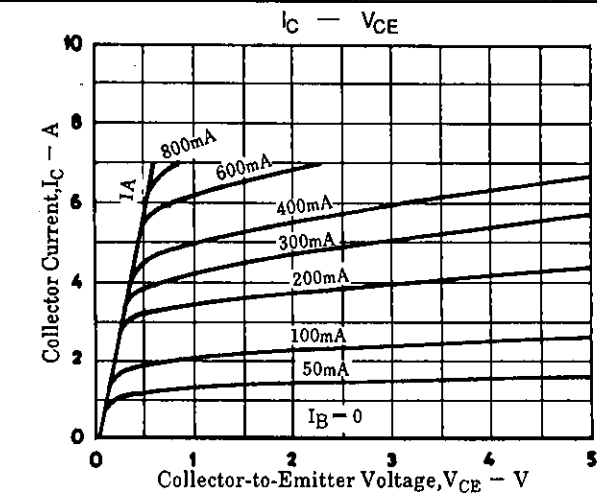
Switching Time Test Circuit



Package Dimensions 2010C



SANYO Electric Co., Ltd. Semiconductor Business Headquarters
 TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN



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