

<b>SANYO</b>	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.

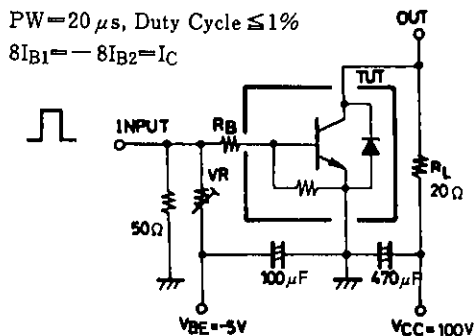
**Absolute Maximum Ratings at  $T_a = 25^\circ C$**

Collector-to-Base Voltage	$V_{CB0}$	400	V	unit
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	$T_c = 25^\circ C$
Junction Temperature	$T_j$	150	$^\circ C$	
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$	

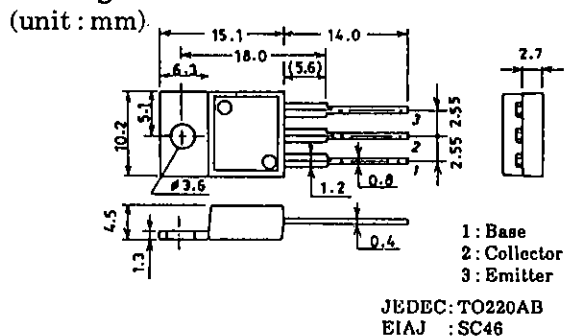
**Electrical Characteristics at  $T_a = 25^\circ C$**

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 200V, I_E = 0$			100	$\mu A$
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	$\mu s$

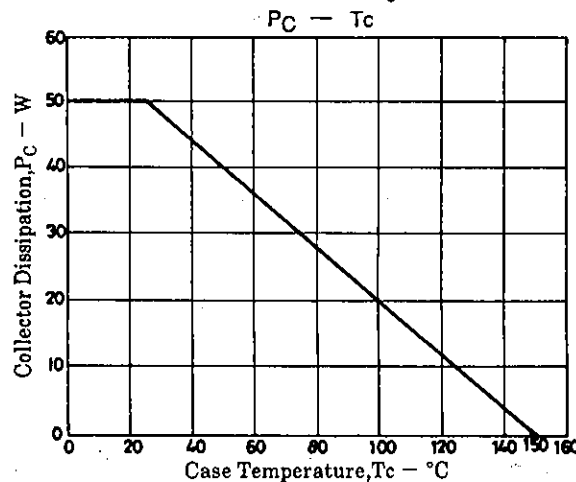
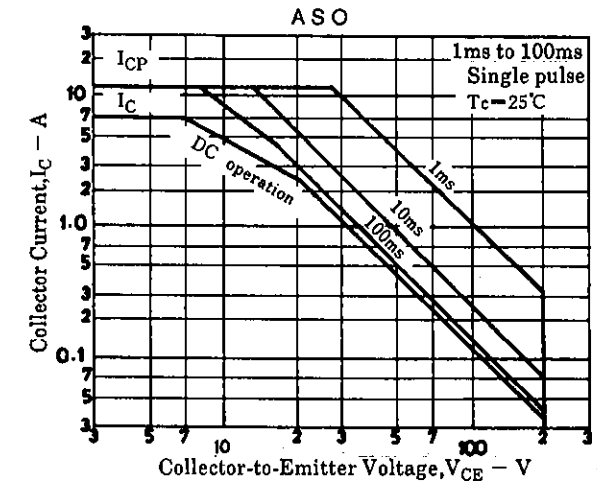
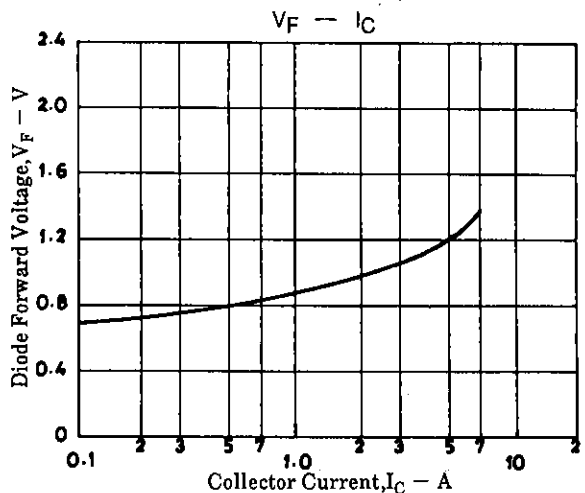
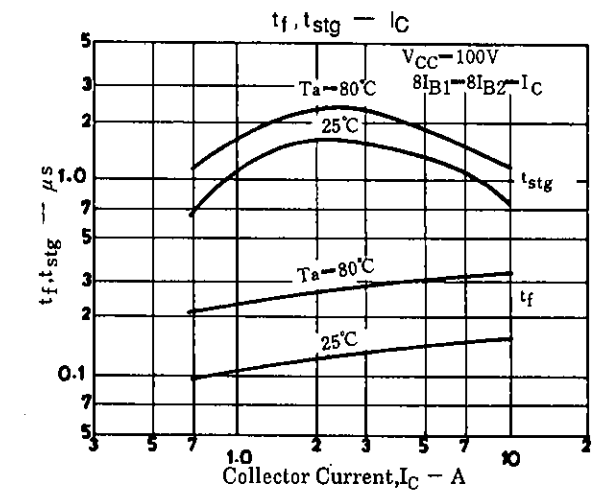
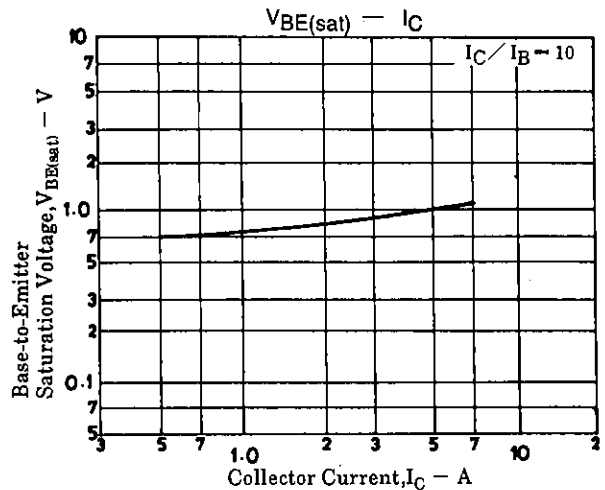
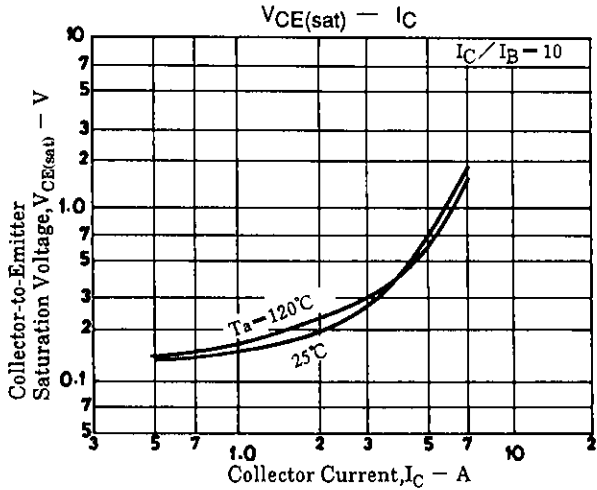
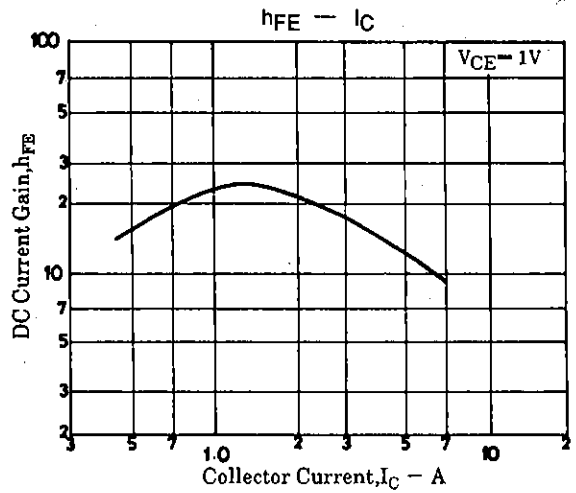
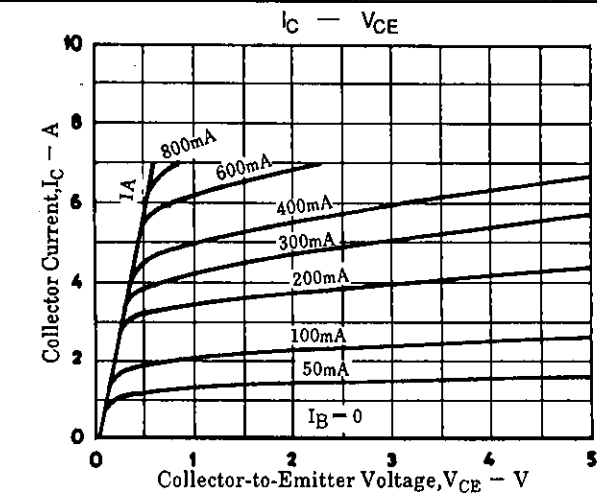
**Switching Time Test Circuit**



**Package Dimensions 2010C**



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