

No.1609D

2SC3591

NPN Epitaxial Planar Silicon Transistor

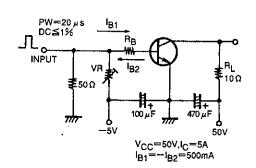
High-Definition CRT Display Horizontal Deflection Output Applications

## **Features**

- · Fast switching speed.
- · Low saturation voltage.
- · Adoption of MBIT process.

Absolute Maximum Ratings a Collector-to-Base Voltage Collector-to-Emitter Voltage Emitter-to-Base Voltage Collector Current Collector Current (Pulse) Base Current Collector Dissipation	$\begin{array}{c} V_{CBO} \\ V_{CEO} \\ V_{EBO} \\ I_{C} \\ I_{CP} \\ I_{B} \\ P_{C} \end{array}$	Tc=25°C		400 200 6 7 12 4 50	unit V V V A A A W	t
Junction Temperature	<u>-</u>		150		°C	
Storage Temperature	Tstg		-55  to  +	150	°C	
Electrical Characteristics at T Collector Cutoff Current Emitter Cutoff Current DC Current Gain  Gain-Bandwidth Product C-E Saturation Voltage B-E Saturation Voltage C-B Breakdown Voltage C-E Breakdown Voltage E-B Breakdown Voltage	$I_{CBO}$ $I_{EBO}$ $h_{FE}(1)$ $h_{FE}(2)$ $f_{T}$ $V_{CE(sat)}$ $V_{BE(sat)}$ $V_{(BR)CBO}$	$\begin{split} &V_{CB}\!=\!250V, I_{E}\!=\!0\\ &V_{EB}\!=\!5V, I_{C}\!=\!0\\ &V_{CE}\!=\!1V, I_{C}\!=\!1A\\ &V_{CE}\!=\!1V, I_{C}\!=\!5A\\ &V_{CE}\!=\!10V, I_{C}\!=\!0.5A\\ &I_{C}\!=\!5A, I_{B}\!=\!0.5A\\ &I_{C}\!=\!5A, I_{E}\!=\!0\\ &I_{C}\!=\!1mA, I_{E}\!=\!0\\ &I_{C}\!=\!1mA, I_{C}\!=\!0\\ \end{split}$	min  15 10 10 400 200 6	typ 40	max 100 100 50 0.8 1.5	unit  µA  µA  WHz  V  V  V  V  V
Fall Time	t <sub>f</sub>	See specified Test Circuit. $I_C=5A$ , $I_{B1}=-I_{B2}=0.5A$	v		0.3	μs

## **Specified Test Circuit**



## Package Dimensions 2010C

(unit:mm)

15.1

14.0

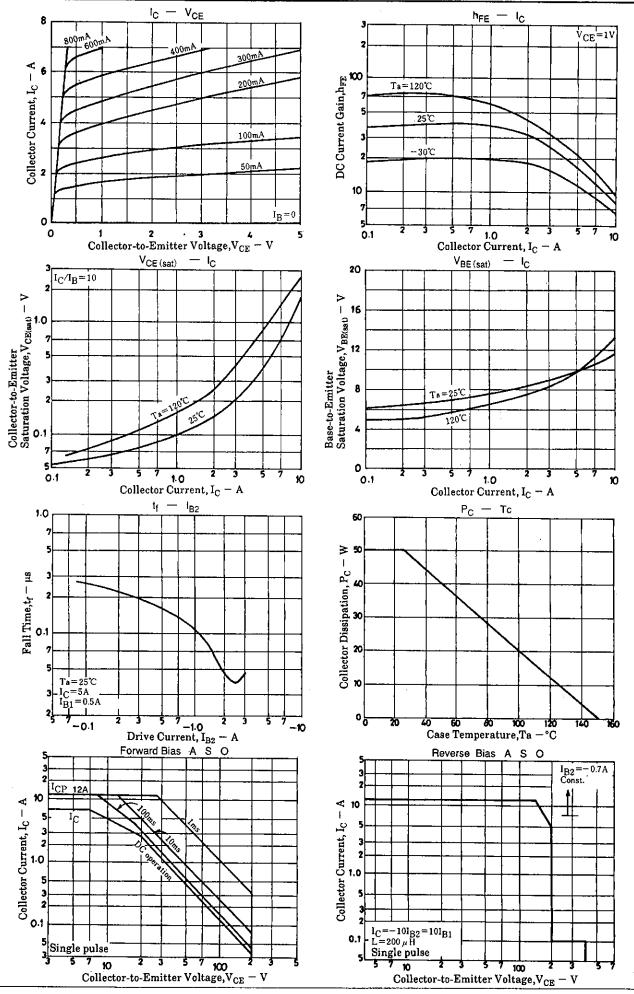
2.7

2.7

3.6

1:Base
2:Collector
3:Emitter

JEDEC: TO220AB
EIAJ: SC46



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