NPN Triple Diffused Planar Silicon Transistor



## 2SC5968

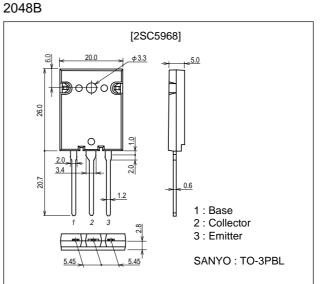
# Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

### Features

- High-speed.
- High breakdown voltage (VCBO=1700V).
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

## **Package Dimensions**

unit : mm



## **Specifications**

#### Absolute Maximum Ratings at Ta= $25^{\circ}C$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1700	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	IC		25	А
Collector Current (Pulse)	ICP		50	А
Collector Dissipation	De		3.5	W
	PC	Tc=25°C	210	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	ICBO	V <sub>CB</sub> =800V, I <sub>E</sub> =0			10	μΑ
	ICES	V <sub>CE</sub> =1700V, R <sub>BE</sub> =0			1.0	mA
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	IC=10mA, RBE=∞	800			V
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0			1.0	mA

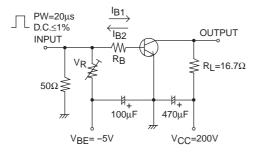
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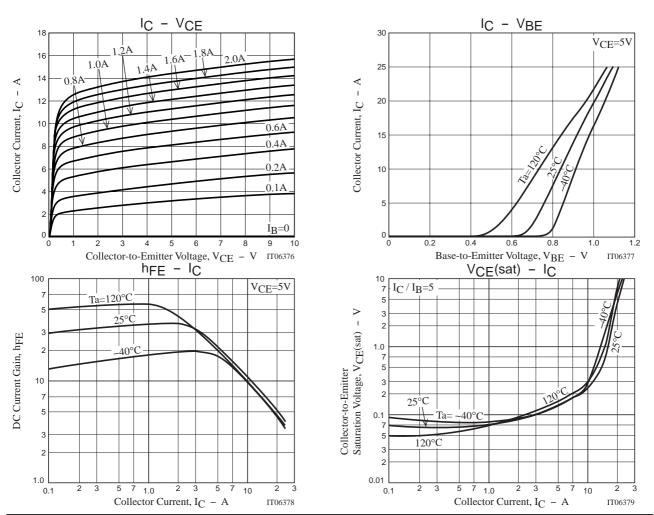
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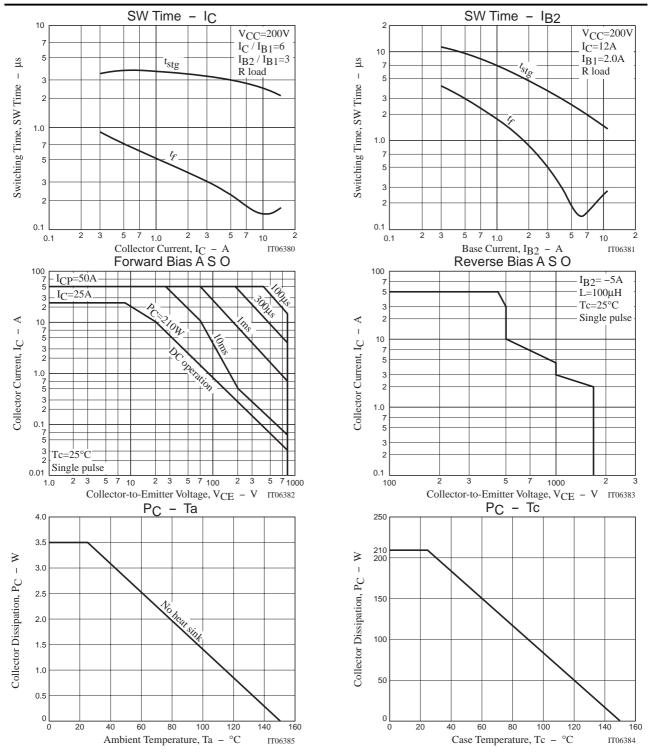
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
DC Current Gain	hFE1	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	15			
	hFE2	V <sub>CE</sub> =5V, I <sub>C</sub> =18A	4		7	
Collectoe-to-Emitter Saturation Voltage	VCE(sat)	IC=16A, IB=4A			3	V
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	IC=16A, IB=4A			1.5	V
Storage Time	tstg	I <sub>C</sub> =12A, I <sub>B1</sub> =2.0A, I <sub>B2</sub> =-6.0A			3.0	μs
Fall Time	tf	IC=12A, IB1=2.0A, IB2=-6.0A			0.2	μs

## **Switching Time Test Circuit**





No.7615-2/4



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