

## 2SC3995

# **Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications**

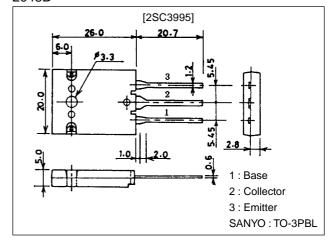
## **Features**

- · High speed ( $t_f$ =100ns typ).
- · High reliability (adoption of HVP process).
- · High breakdown voltage (V<sub>CBO</sub>=1500V).
- · Adoption of MBIT process.

## **Package Dimensions**

unit:mm

2048B



## **Specifications**

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

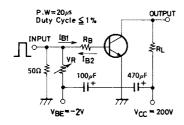
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		1500	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		6	V
Collector Current	IC		12	Α
Collector Current (Pulse)	I <sub>CP</sub>		30	Α
Collector Dissipation	PC	Tc=25°C	180	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

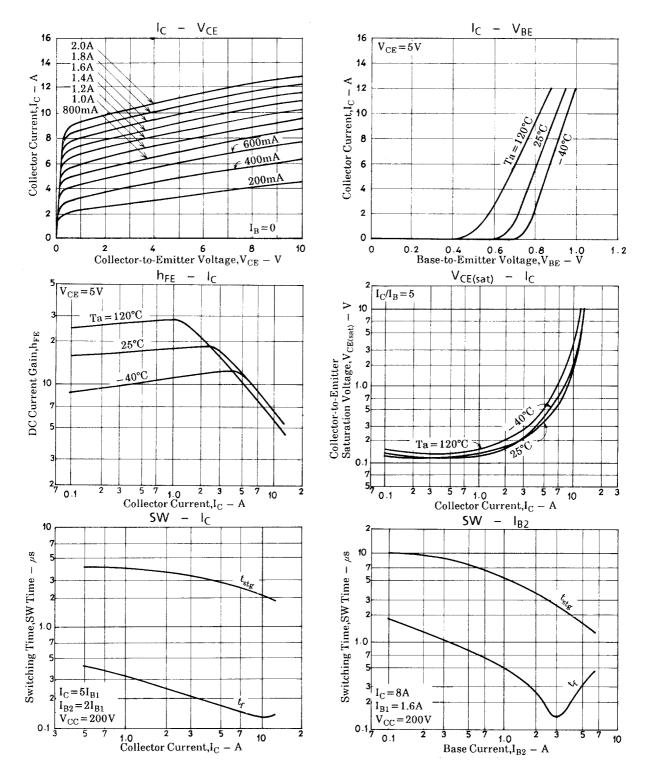
#### Electrical Characteristics at Ta = 25°C

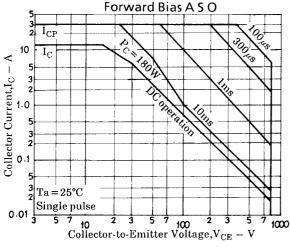
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =800V, I <sub>E</sub> =0			10	μΑ
	ICES	V <sub>CE</sub> =1500V, R <sub>BE</sub> =0			1.0	mA
Collector-to-Emitter Sastain Voltage	VCEO(sus)	I <sub>C</sub> =100mA, I <sub>B</sub> =0	800			V
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0			1.0	mA
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =10A, I <sub>B</sub> =2.5A			5	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =10A, I <sub>B</sub> =2.5A			1.5	V
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =5V, I <sub>C</sub> =1.0A	8		30	
Do Current Gain	h <sub>FE</sub> 2	V <sub>CE</sub> =5V, I <sub>C</sub> =10A	4		8	
Storage Time	t <sub>stg</sub>	I <sub>C</sub> =8A, I <sub>B1</sub> =1.6A, I <sub>B2</sub> =-3.2A			3.0	μs
Fall Time	t <sub>f</sub>	I <sub>C</sub> =8A, I <sub>B2</sub> =1.6A, I <sub>B2</sub> =-3.2A			0.2	μs

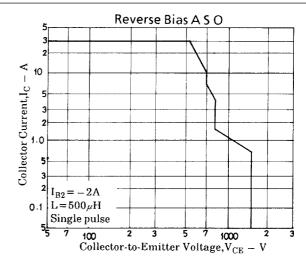
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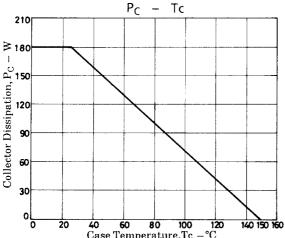
### **Switching Time Test Circuit**











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