

2SC5690

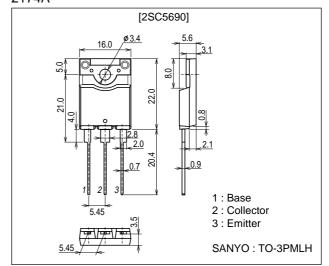
# Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

#### **Features**

- · High speed.
- High breakdown voltage(VCBO=1500V).
- High reliability(Adoption of HVP process).
- · Adoption of MBIT process.
- · On-chip damper diode.

### **Package Dimensions**

unit : mm 2174A



# **Specifications**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1500	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	IC		15	Α
Collector Current (Pulse)	ICP		35	Α
Collector Dissipation	D-		3.0	W
	PC	Tc=25°C	85	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	ICBO	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 Sustain Voltage	VCEO(sus)	I <sub>C</sub> =100mA, I <sub>B</sub> =0	800			V
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0	40		130	mA
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=10.8A, IB=2.7A			3	V
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =10.8A, I <sub>B</sub> =2.7A			1.5	V
DC Current Gain	hFE1	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	10			
	hFE2	VCE=5V, IC=12A	4		7	

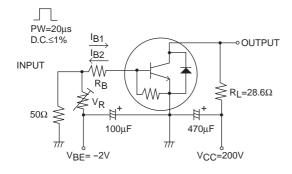
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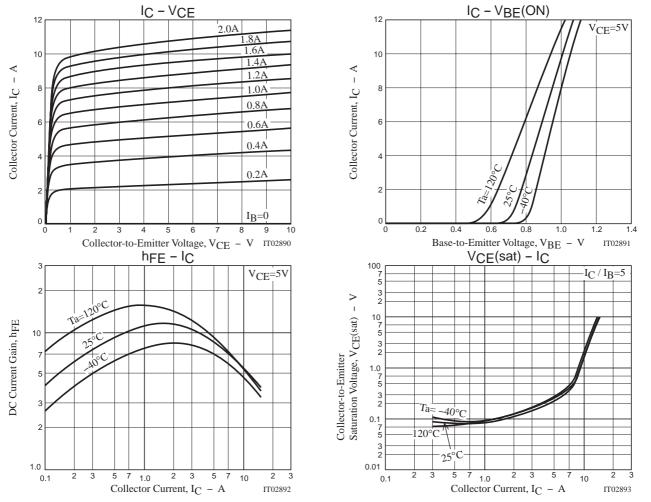
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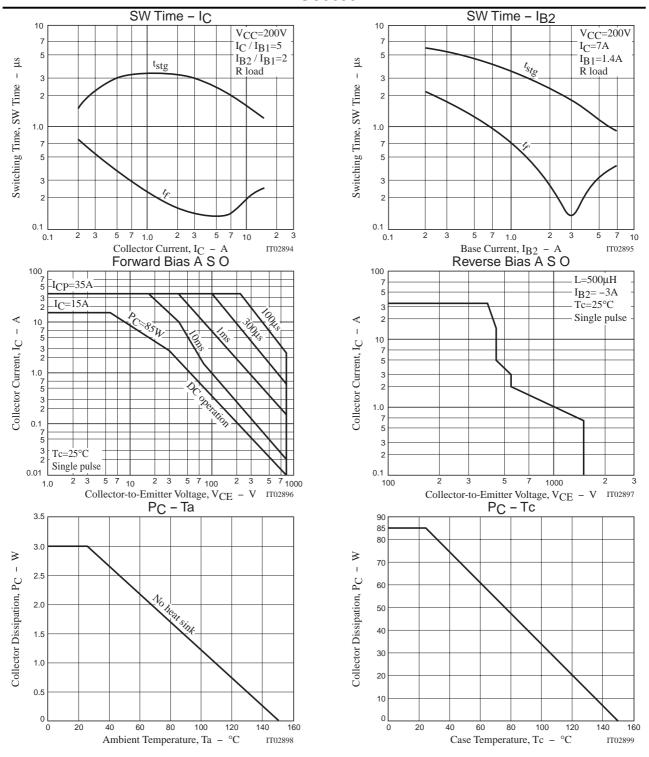
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Diode Forward Voltage	٧F	I <sub>EC</sub> =12A			2	V
Storage Time	tstg	IC=7A, IB1=1.4A, IB2=-2.8A			3.0	μs
Fall Time	tf	I <sub>C</sub> =7A, I <sub>B1</sub> =1.4A, I <sub>B2</sub> =-2.8A			0.2	μs

## **Switching Time Test Circuit**







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