

2SC5696

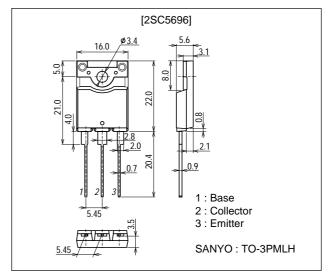
# Color TV Horizontal Deflection Output Applications

## **Features**

- · High speed.
- High breakdown voltage(VCBO=1600V).
- · 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		1600	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	IC		12	Α
Collector Current (Pulse)	ICP		36	Α
Collector Dissipation	Do		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	O. made at	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	ICBO	V <sub>CB</sub> =800V, I <sub>E</sub> =0			10	μΑ
Collector Cutoff Current	ICES	VCE=1600V, RBE=0			1.0	mA
Collector Sustain Voltage	V <sub>CEO</sub> (sus)	I <sub>C</sub> =100mA, I <sub>B</sub> =0	800			V
Emitter Cutoff Current	IFBO	V <sub>FB</sub> =4V, I <sub>C</sub> =0	80		800	mA

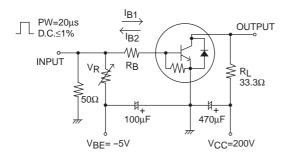
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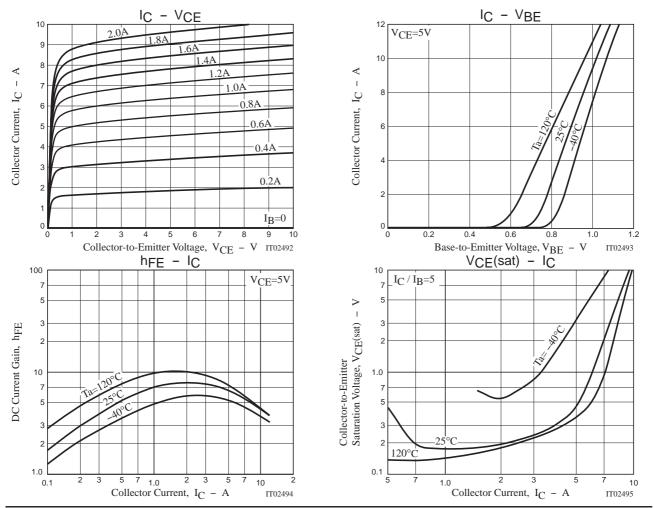
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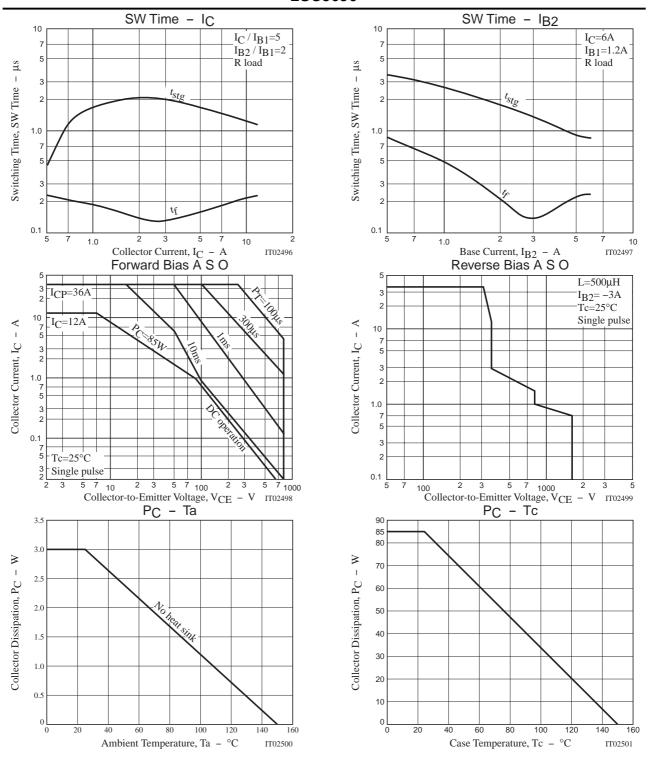
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector-to-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =7.2A, I <sub>B</sub> =1.8A			3	V
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =7.2A, I <sub>B</sub> =1.8A			1.5	V
DC Current Gain	hFE1	VCE=5V, IC=1A	3		11	
	hFE2	V <sub>CE</sub> =5V, I <sub>C</sub> =8A	4		7	
Fall Time	tf	I <sub>C</sub> =6A, I <sub>B1</sub> =1.2A, I <sub>B2</sub> =-2.4A			0.3	μs
Storage Time	tstg	IC=6A, IB1=1.2A, IB2=-2.4A			2.0	μs
Diode Forward Voltage	٧F	IEC=10A			2.2	V

## **Switching Time Test Circuit**







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