

2SC5689

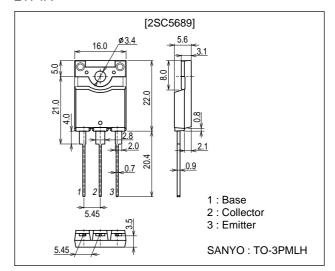
# Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

# **Features**

- · High speed.
- High breakdown voltage(V<sub>CBO</sub>=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		10	Α
Collector Current (Pulse)	ICP		25	Α
Collector Dissipation	PC		3.0	W
		Tc=25°C	80	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Offic
Collector Cutoff Current	ІСВО	V <sub>CB</sub> =800V, I <sub>E</sub> =0			10	μΑ
Collector Cutoff Current	ICES	VCE=1500V, RBE=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

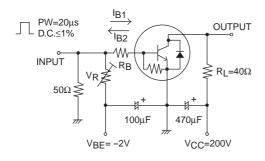
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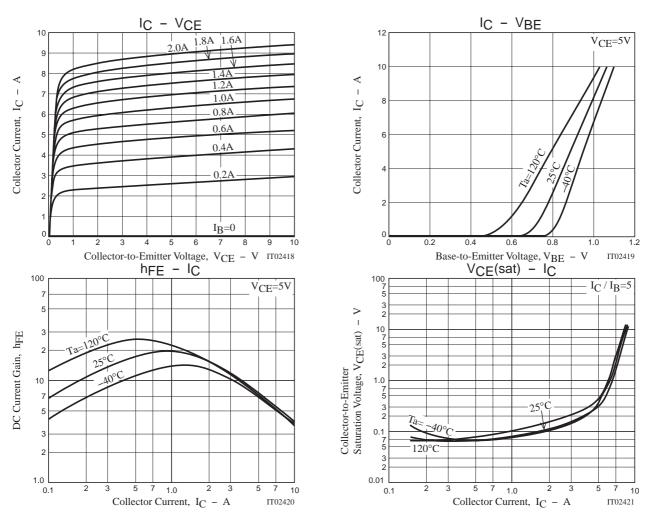
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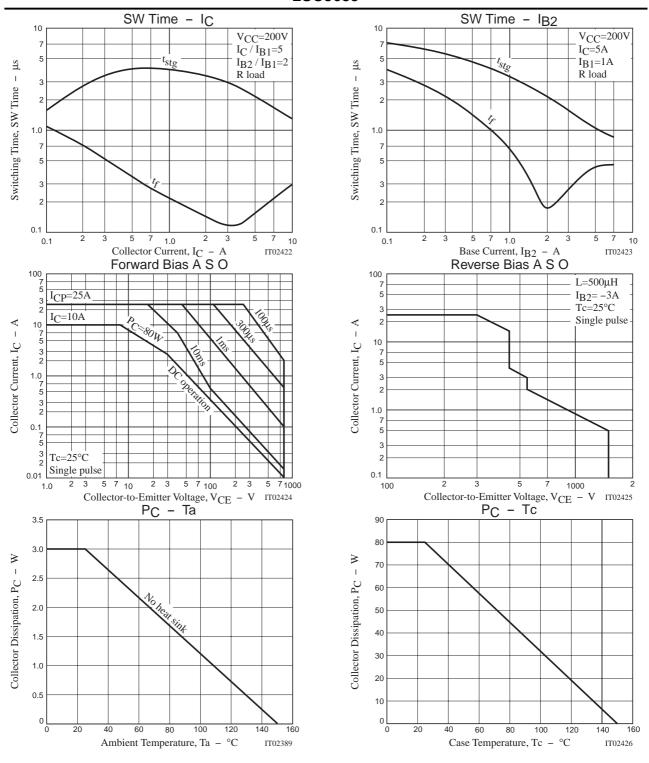
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
DC Current Gain	hFE1	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	15			
	hFE2	V <sub>CE</sub> =5V, I <sub>C</sub> =8A	4		7	
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=7.2A, IB=1.8A			3	٧
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
Diode Forward Voltage	٧F	IEC=8A			2.0	V
Storage Time	tstg	IC=5A, IB1=1A, IB2=-2A			3.0	μs
Fall Time	tf	I <sub>C</sub> =5A, I <sub>B1</sub> =1A, I <sub>B2</sub> =-2A		0.1	0.2	μs

# **Switching Time Test Circuit**







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