

2SC5696

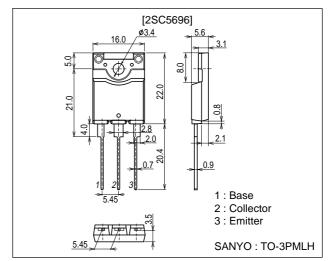
Color TV Horizontal Deflection Output Applications

Features

- · High speed.
- High breakdown voltage(V_{CBO}=1600V).
- High reliability(Adoption of HVP process).
- · Adoption of MBIT process.
- · On-chip damper diode.

Package Dimensions

unit : mm 2174



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 | PC | | 3.0 | W |
| | | 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 | Oill |
| Collector Cutoff Current | ICBO | V _{CB} =800V, I _E =0 | | | 10 | μΑ |
| Collector Cutoff Current | ICES | VCE=1600V, RBE=0 | | | 1.0 | mA |
| Collector Sustain Voltage | VCEO(sus) | I _C =100mA, I _B =0 | 800 | | | V |
| Emitter Cutoff Current | IEBO | V _{EB} =4V, I _C =0 | 80 | | 800 | mA |
| Collector-to-Emitter Saturation Voltage | VCE(sat) | IC=7.2A, IB=1.8A | | | 3 | V |
| Base-to-Emitter Saturation Voltage | V _{BE} (sat) | I _C =7.2A, I _B =1.8A | | | 1.5 | V |

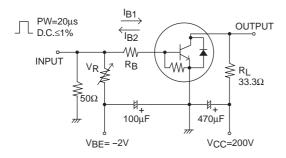
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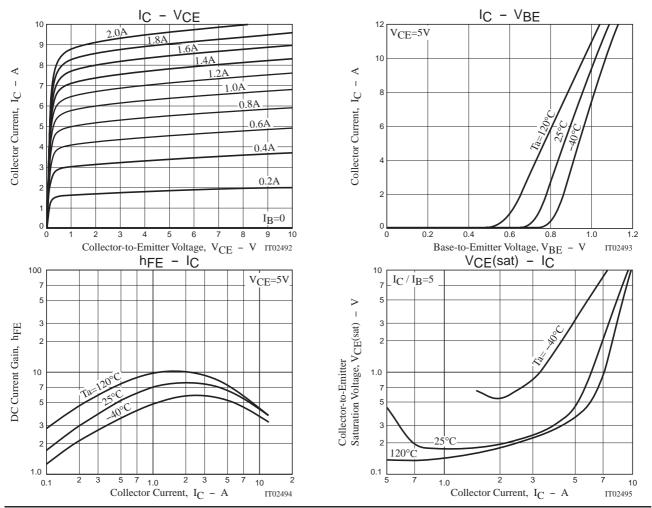
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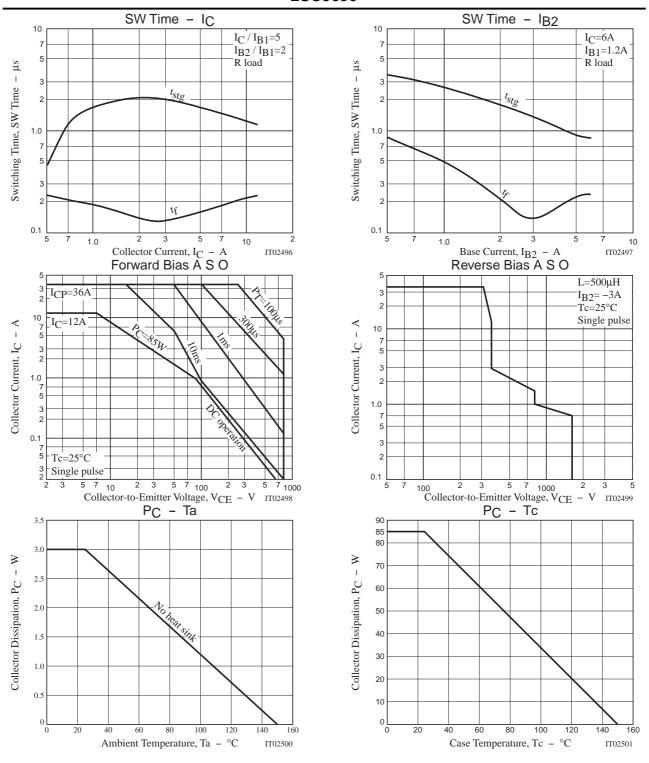
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| Parameter | Symbol | Conditions | Ratings | | | Unit |
|-----------------------|--------|---|---------|-----|-----|-------|
| | | | min | typ | max | Offic |
| DC Current Gain | hFE1 | V _{CE} =5V, I _C =1A | 3 | | 11 | |
| | hFE2 | V _{CE} =5V, I _C =8A | 4 | | 7 | |
| Fall Time | tf | IC=6A, IB1=1.2A, IB2=-2.4A | | | 0.3 | μs |
| Storage Time | tstg | I _C =6A, I _{B1} =1.2A, I _{B2} =-2.4A | | | 2.0 | μs |
| Diode Forward Voltage | ٧F | I _{EC} =10A | | | 2.2 | V |

Switching Time Test Circuit







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