

2SD2580

Color TV Horizontal Deflection Output Applications

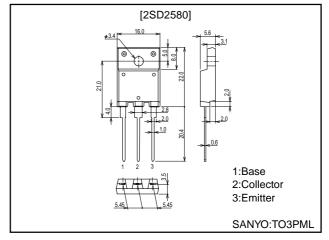
Features

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

Package Dimensions

unit:mm

2039D



Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|------------|-------------|------|
| Collector-to-Base Voltage | V _{CBO} | | 1500 | V |
| Collector-to-Emitter Voltage | V _{CEO} | | 800 | V |
| Emitter-to-Base Voltage | V _{EBO} | | 6 | V |
| Collector Current | IC | | 10 | Α |
| Collector Current (pulse) | ICP | | 30 | Α |
| Collector Dissipation | PC | | 3.0 | W |
| | | Tc=25°C | 70 | W |
| Junction Temperature | Tj | | 150 | °C |
| Storage Temperature | Tstg | | -55 to +150 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditons | Ratings | | | Unit |
|---------------------------|-----------------------|--|---------|-----|-----|-------|
| | | | min | typ | max | Offic |
| Collector Cutoff Current | I _{CBO} | V _{CB} =800V, I _E =0 | | | 10 | μΑ |
| Collector Cutoff Current | ICES | V _{CE} =1500V, R _{BE} =0 | | | 1.0 | mA |
| Collector Sustain Voltage | V _{CEO(sus)} | I _C =100mA, I _B =0 | 800 | | | V |
| Emitter Cutoff Current | I _{EBO} | $V_{EB}=4V$, $I_{C}=0$ | 40 | | 130 | mA |

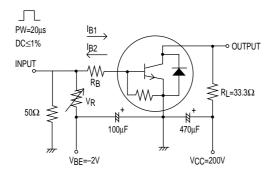
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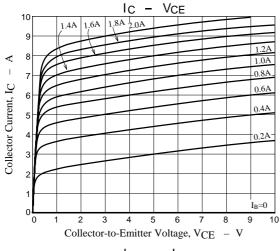
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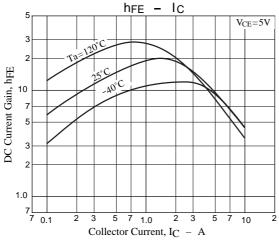
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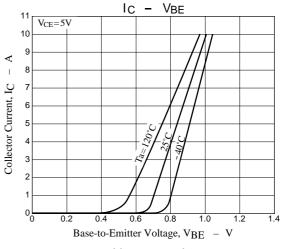
| Parameter | Symbol | Conditons | Ratings | | | Unit |
|---|----------------------|---|---------|-----|-----|-------|
| | | | min | typ | max | Offic |
| Collector-to-Emitter Saturation Voltage | V _{CE(sat)} | I _C =8A, I _B =1.6A | | | 5 | V |
| Base-to-Emitter Saturation Voltage | V _{BE(sat)} | I _C =8A, I _B =1.6A | | | 1.5 | V |
| DC Current Gain | h _{FE} 1 | V _{CE} =5V, I _C =1A | 15 | | 30 | |
| | h _{FE} 2 | V _{CE} =5V, I _C =8A | 5 | | 8 | |
| Fall Time | t _f | I _C =6A, I _{B1} =1.2A, I _{B2} =-2.4A | | | 0.3 | μs |

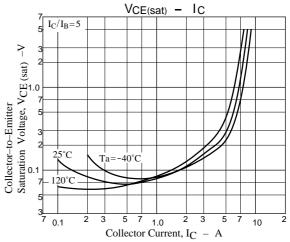
Switching Time Test Circuit

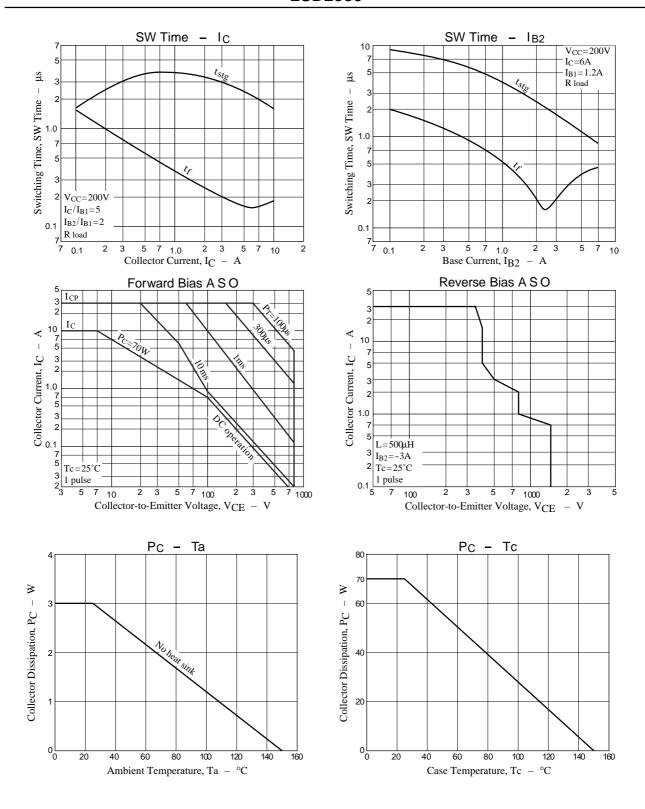












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