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|--------------|---|----------------|
| SANYO | No.2977 | 2SC4478 |
| | NPN Epitaxial Planar Silicon Transistor High-Definition CRT Display Horizontal Deflection Output Applications | |

Features

- Fast switching speed
- Low saturation voltage
- Adoption of MBIT process
- Micaless package facilitating easy mounting

Absolute Maximum Ratings at Ta = 25°C

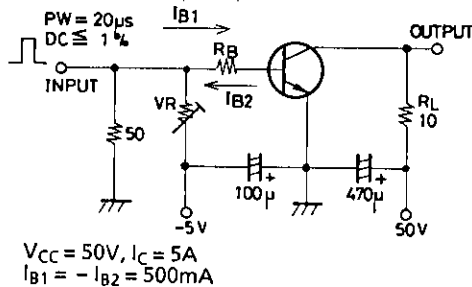
| | | | unit |
|------------------------------|------------------|-------------|------|
| Collector-to-Base Voltage | V _{CB0} | 400 | V |
| Collector-to-Emitter Voltage | V _{CEO} | 200 | V |
| Emitter-to-Base Voltage | V _{EBO} | 6 | V |
| Collector Current | I _C | 7 | A |
| Peak Collector Current | i _{cp} | 12 | A |
| Base Current | I _B | 4 | A |
| Collector Dissipation | P _C | 2 | W |
| | | 30 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |

T_C = 25°C

Electrical Characteristics at Ta = 25°C

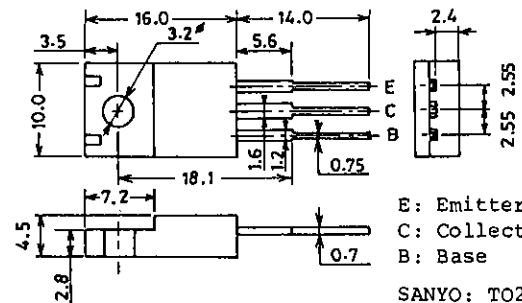
| | | | min | typ | max | unit |
|--------------------------|----------------------|--|-----|-----|-----|------|
| Collector Cutoff Current | I _{CB0} | V _{CB} = 250V, I _E = 0 | | | 100 | μA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} = 5V, I _C = 0 | | | 100 | μA |
| DC Current Gain | h _{FE} (1) | V _{CE} = 1V, I _C = 1A | 15 | | | |
| | h _{FE} (2) | V _{CE} = 1V, I _C = 5A | 10 | | 50 | |
| Gain-Bandwidth Product | f _T | V _{CE} = 10V, I _C = 0.5A | 10 | 40 | | MHz |
| C-E Saturation Voltage | V _{CE(sat)} | I _C = 5A, I _B = 0.5A | | | 0.8 | V |
| B-E Saturation Voltage | V _{BE(sat)} | I _C = 5A, I _B = 0.5A | | | 1.5 | V |
| C-B Breakdown Voltage | V _{(BR)CBO} | I _C = 1mA, I _E = 0 | 400 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} | I _C = 1mA, R _{BE} = ∞ | 200 | | | V |
| E-B Breakdown Voltage | V _{(BR)EBO} | I _E = 1mA, I _C = 0 | 6 | | | V |
| Fall Time | t _f | (See specified Test Circuit. I _C = 5A, I _{B1} = -I _{B2} = 0.5A) | | | 0.3 | μs |

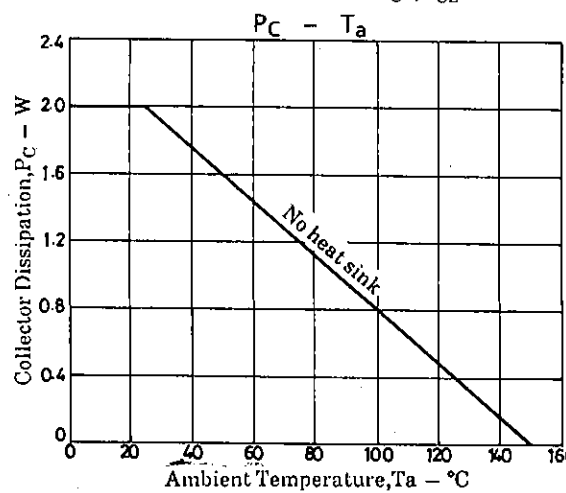
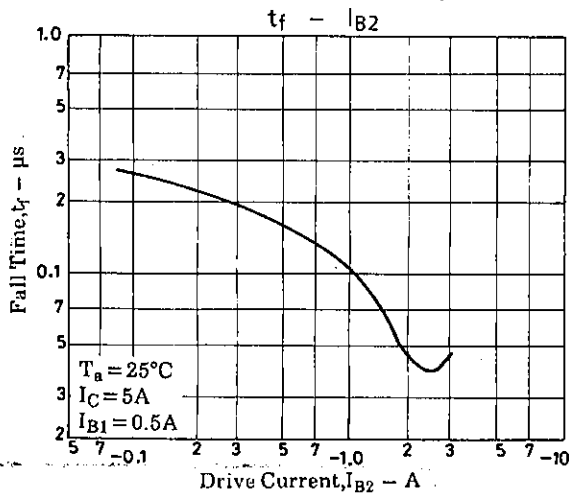
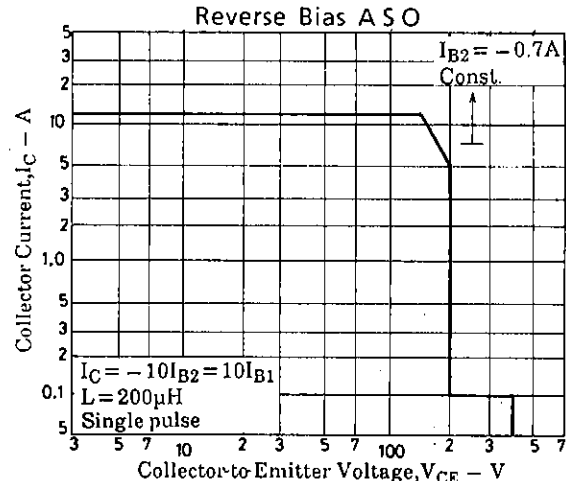
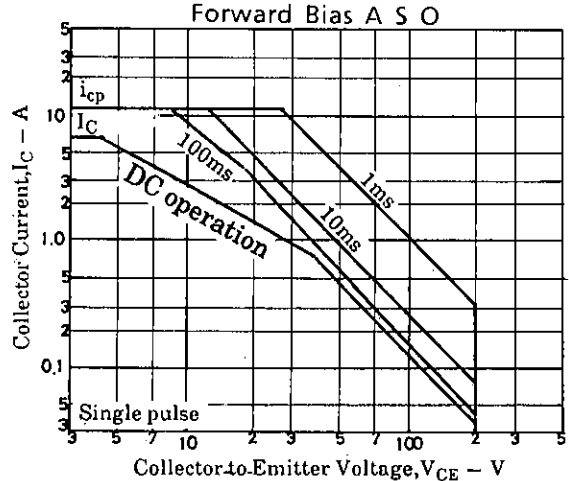
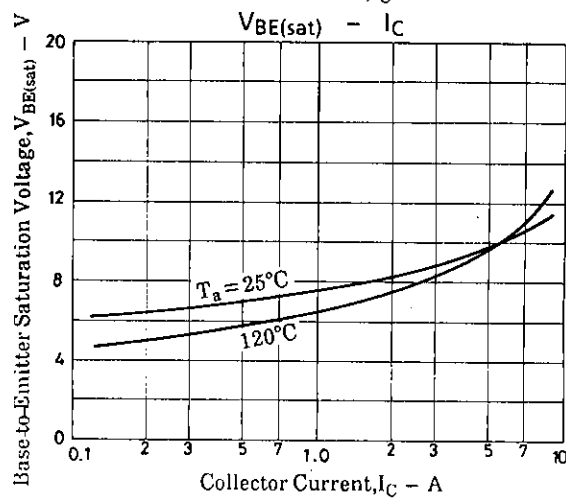
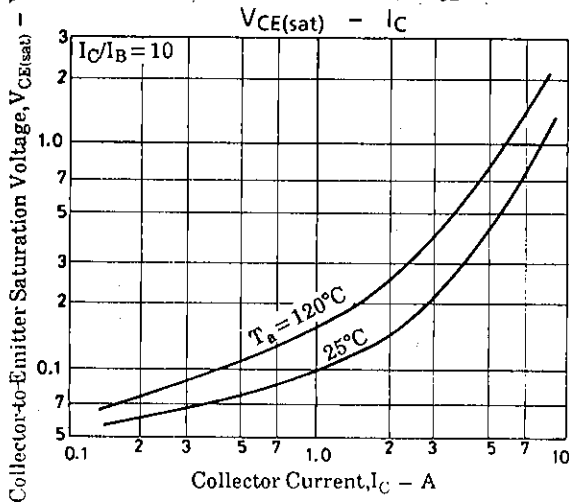
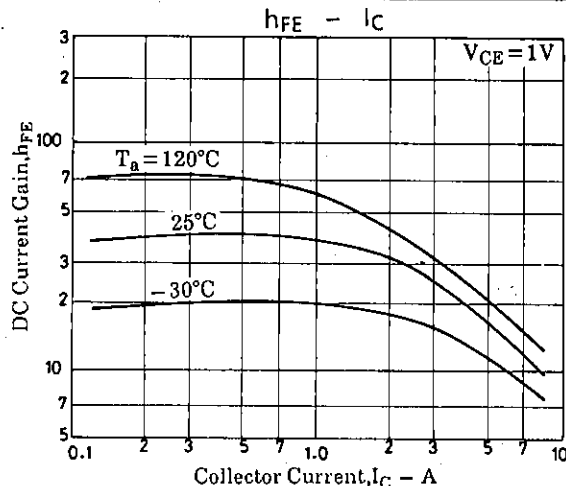
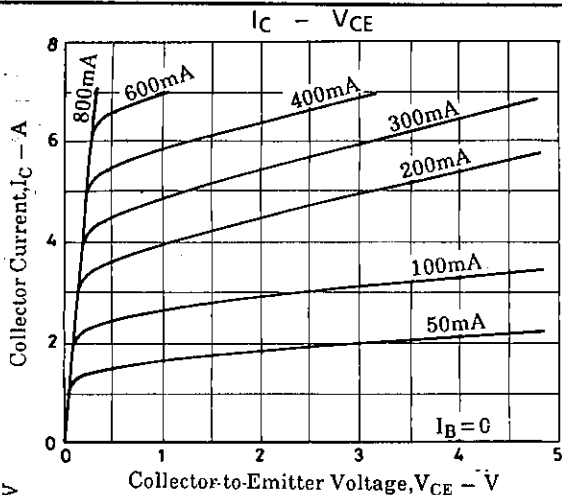
Switching Time Test Circuit

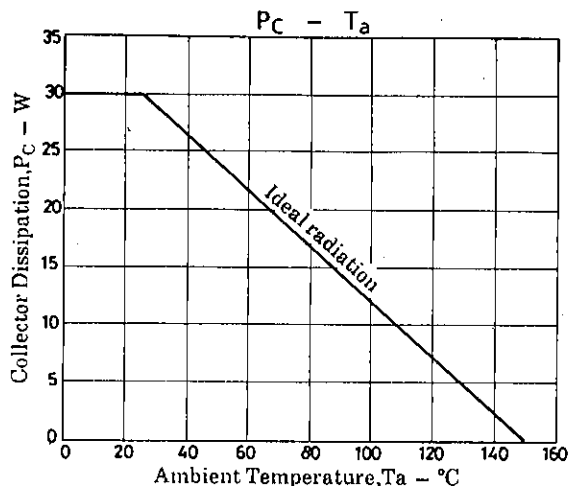


Package Dimensions 2041

(unit : mm)







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