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|  | No.2549A | <h1 style="margin: 0;">2SD1958</h1> <p style="margin: 0;">NPN Triple Diffused Planar Silicon Transistor</p> <p style="margin: 0;">TV Horizontal Deflection Output, High-Power Switching Applications</p> |
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Features

- Excellent t_f permitting efficient drive with less internal dissipation

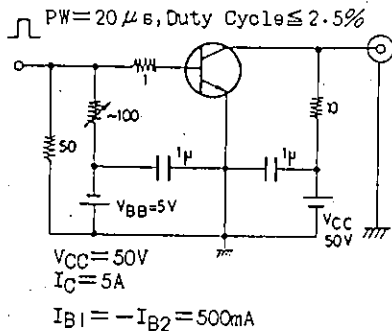
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| | | | unit |
|------------------------------|-----------|-------------|------------------|
| Collector-to-Base Voltage | V_{CBO} | 200 | V |
| Collector-to-Emitter Voltage | V_{CEO} | 60 | V |
| Emitter-to-Base Voltage | V_{EBO} | 6 | V |
| Collector Current | I_C | 4.5 | A |
| Peak Collector Current | i_{cp} | 10 | A |
| Collector Dissipation | P_C | 30 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

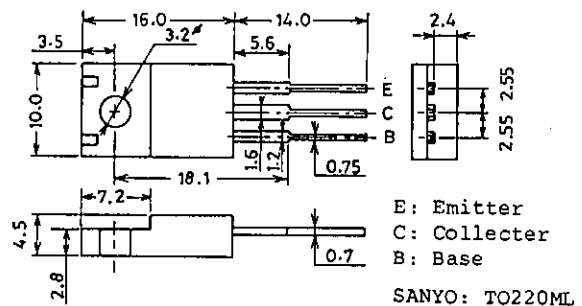
Electrical Characteristics at $T_a=25^\circ\text{C}$

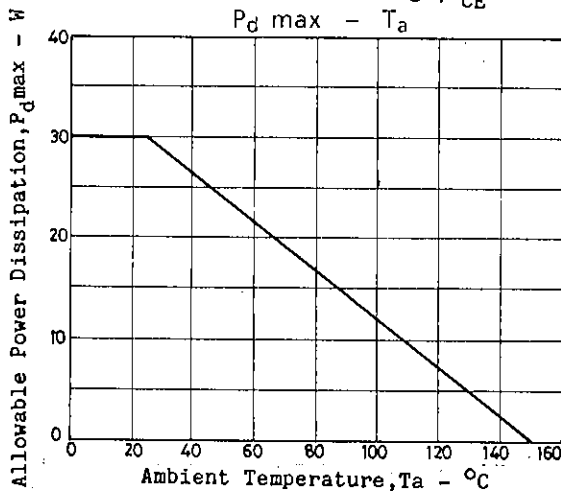
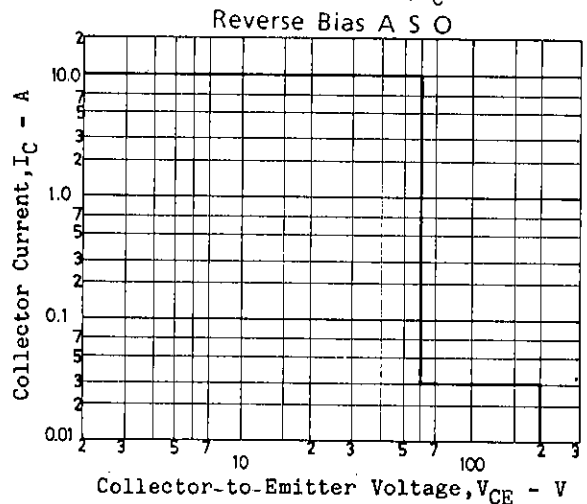
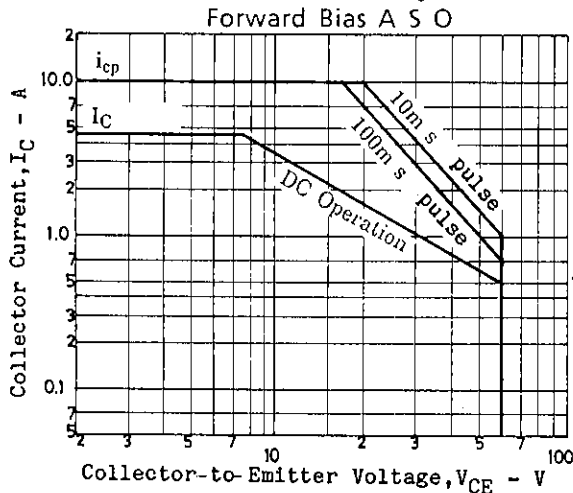
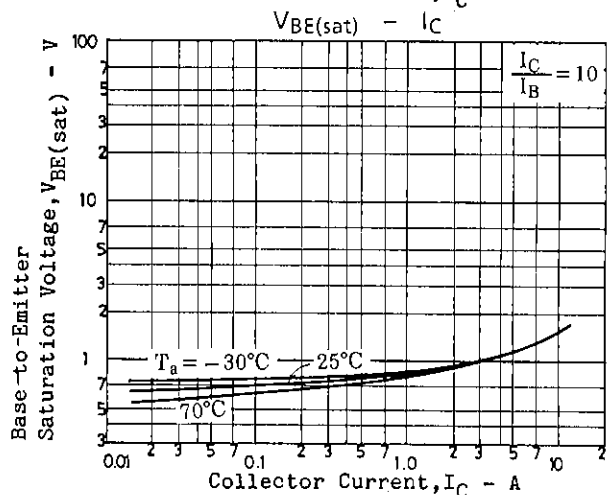
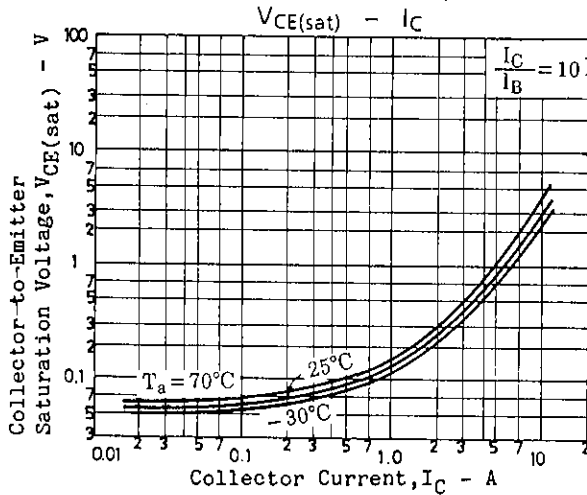
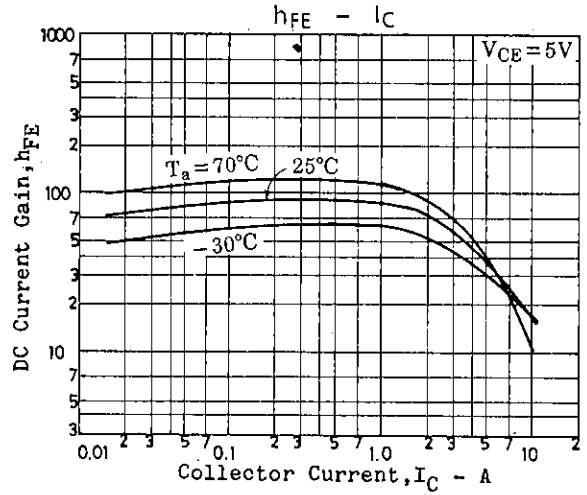
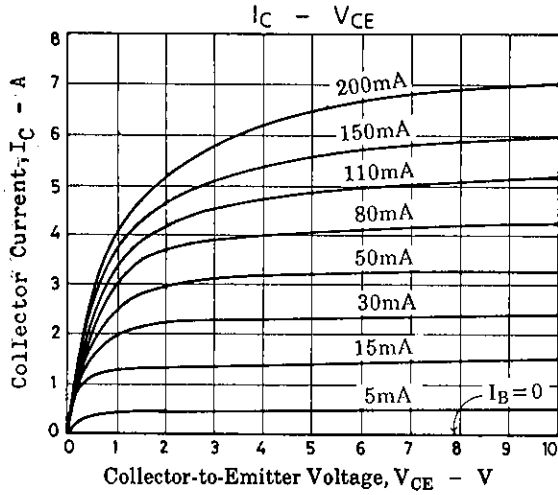
| | | | min | typ | max | unit |
|--------------------------|---------------|-----------------------------------|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{CBO} | $V_{CB}=40\text{V}, I_E=0$ | | | 0.1 | mA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=5\text{V}, I_C=0$ | | | 0.1 | mA |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}=5\text{V}, I_C=1\text{A}$ | 30 | | 160 | |
| | $h_{FE(2)}$ | $V_{CE}=5\text{V}, I_C=4\text{A}$ | 25 | | | |
| Gain-Bandwidth Product | f_T | $V_{CE}=5\text{V}, I_C=1\text{A}$ | | 10 | | MHz |
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C=4\text{A}, I_B=0.4\text{A}$ | 0.5 | | 1.0 | V |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C=4\text{A}, I_B=0.4\text{A}$ | | | 1.5 | V |
| C-B Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=5\text{mA}, I_E=0$ | 200 | | | V |
| C-E Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=5\text{mA}, R_{BE}=\infty$ | 60 | | | V |
| E-B Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=5\text{mA}, I_C=0$ | 6 | | | V |
| Fall Time | t_f | See specified Test Circuit. | 0.2 | 0.5 | | μs |

Switching Time Test Circuit



Package Dimensions 2041 (unit:mm)





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