

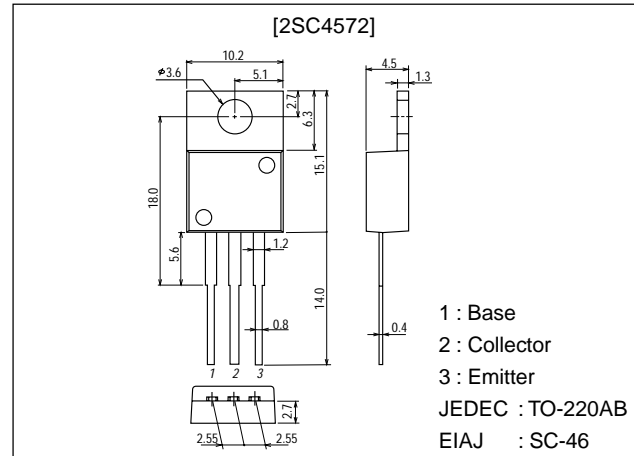
**2SC4572****800V/20mA Switching Applications****Features**

- High breakdown voltage.
- Small Cob.
- High reliability (Adoption of HVP process).

**Package Dimensions**

unit:mm

2010C

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

| Parameter                    | Symbol    | Conditions | Ratings     | Unit |
|------------------------------|-----------|------------|-------------|------|
| Collector-to-Base Voltage    | $V_{CBO}$ |            | 800         | V    |
| Collector-to-Emitter Voltage | $V_{CEO}$ |            | 800         | V    |
| Emitter-to-Base Voltage      | $V_{EBO}$ |            | 7           | V    |
| Collector Current            | $I_C$     |            | 20          | mA   |
| Collector Current (Pulse)    | $I_{CP}$  |            | 60          | mA   |
| Collector Dissipation        | $P_C$     |            | 1.75        | W    |
| Junction Temperature         | $T_J$     |            | 150         | °C   |
| Storage Temperature          | $T_{stg}$ |            | -55 to +150 | °C   |

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

| Parameter                               | Symbol        | Conditions            | Ratings |     |     | Unit    |
|---|---------------|-----------------------|---------|-----|-----|---------|
|   |               |                       | min     | typ | max |         |
| Collector Cutoff Current                | $I_{CBO}$     | $V_{CB}=800V, I_E=0$  |         |     | 1   | $\mu A$ |
| Emitter Cutoff Current                  | $I_{EBO}$     | $V_{EB}=5V, I_C=0$    |         |     | 1   | $\mu A$ |
| DC Current Gain                         | $h_{FE1}$     | $V_{CE}=5V, I_C=2mA$  | 20      |     | 50  |         |
|   | $h_{FE2}$     | $V_{CE}=5V, I_C=10mA$ | 10      |     |     |         |
| Gain-Bandwidth Product                  | $f_T$         | $V_{CE}=10V, I_C=2mA$ |         | 40  |     | MHz     |
| Output Capacitance                      | $C_{ob}$      | $V_{CB}=100V, f=1MHz$ |         | 1.6 |     | pF      |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10mA, I_B=2mA$   |         |     | 1   | V       |
| Base-to-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=10mA, I_B=2mA$   |         |     | 1.5 | V       |

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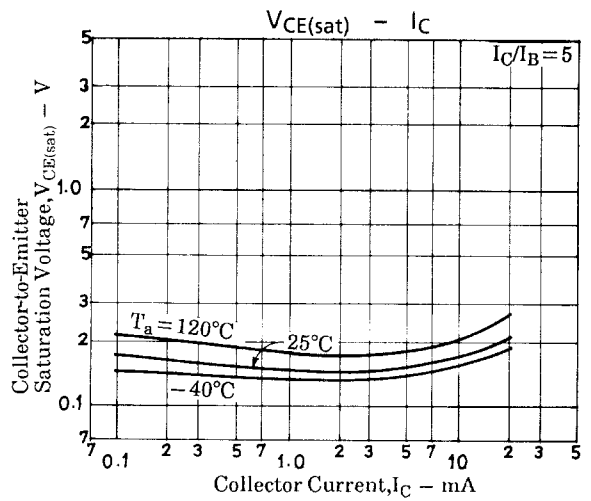
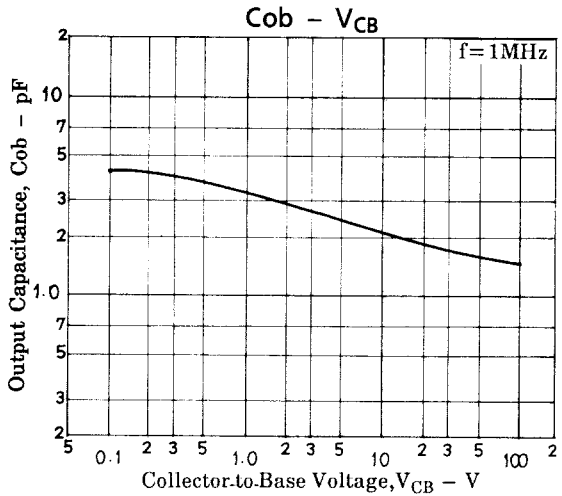
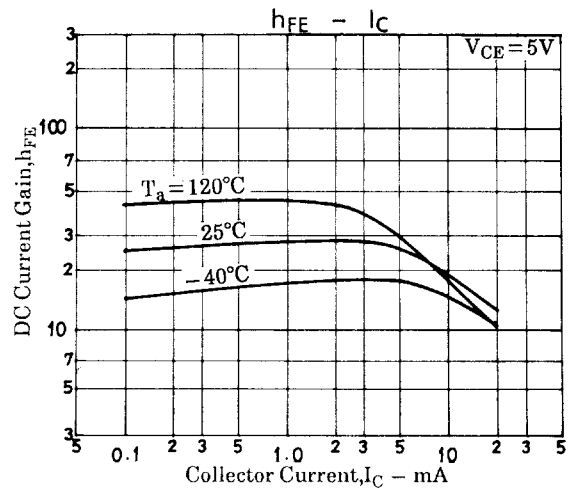
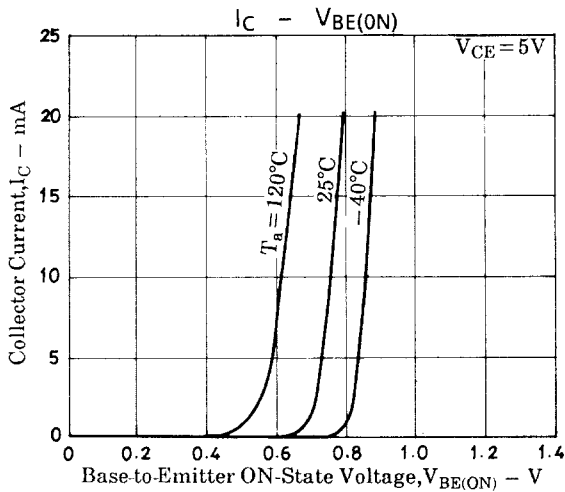
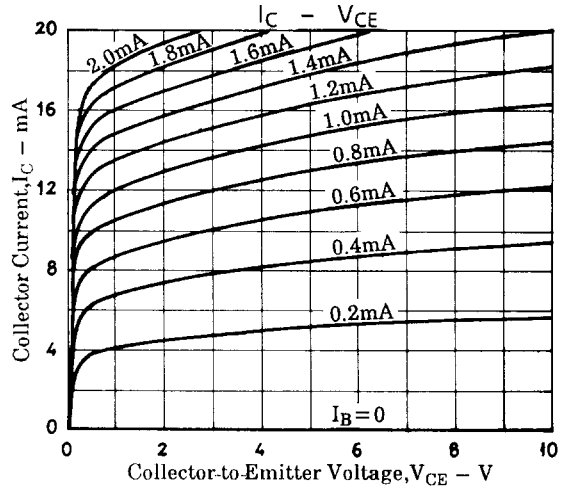
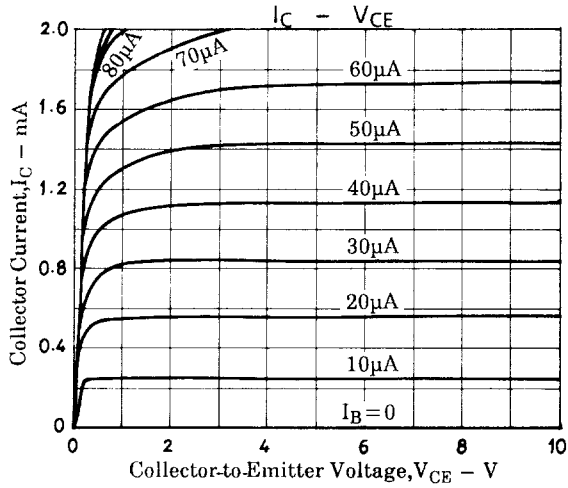
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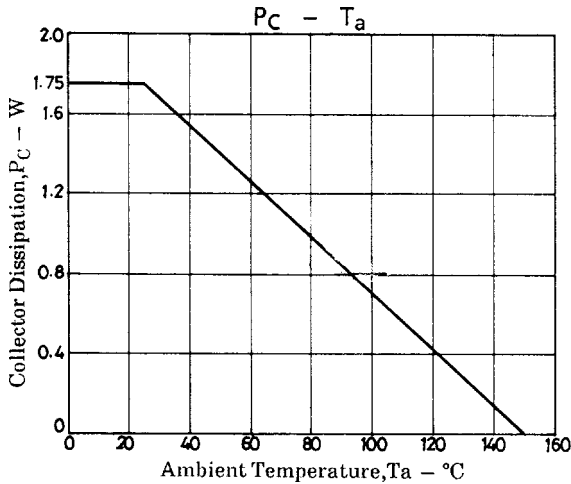
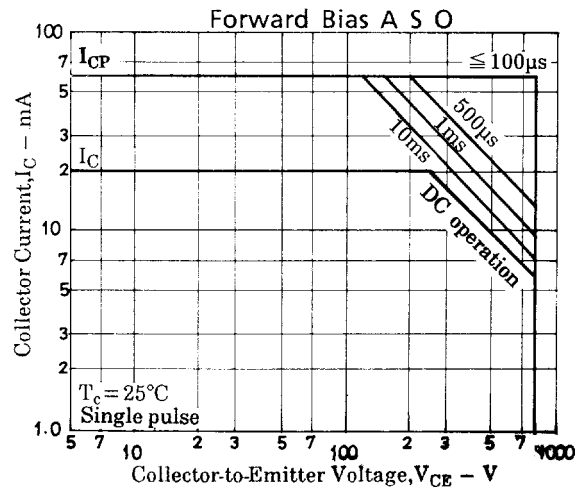
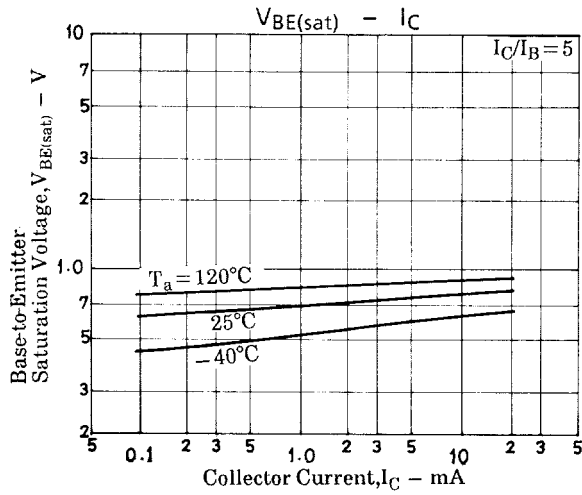
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# 2SC4572

| Parameter                              | Symbol        | Conditions               | Ratings |     |     | Unit          |
|--|---------------|--------------------------|---------|-----|-----|---------------|
|  |               |                          | min     | typ | max |               |
| Collector-to-Base Breakdown Voltage    | $V_{(BR)CBO}$ | $I_C=100\mu A, I_E=0$    | 800     |     |     | V             |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1mA, R_{BE}=\infty$ | 800     |     |     | V             |
| Emitter-to-Base Breakdown Voltage      | $V_{(BR)EBO}$ | $I_E=100\mu A, I_C=0$    | 7       |     |     | V             |
| Thermal Resistance                     | $R_{th(j-c)}$ | Junction - Case          |         |     | 8.3 | $^{\circ}C/w$ |





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