

**2SC4633**

1200V/30mA High-Voltage Amplifier, High-Voltage Switching Applications

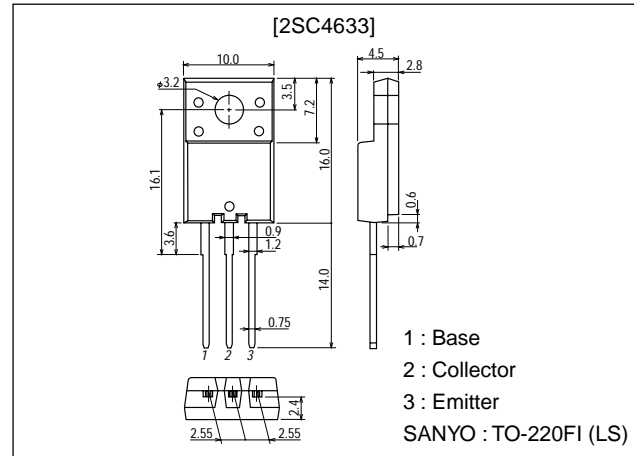
Features

- High breakdown voltage (V_{CE0} min=1200V).
- Small Cob (typical Cob=2.0pF).
- Full-isolation package.
- High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2079B



Specifications

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|------------|-------------|------------------|
| Collector-to-Base Voltage | V_{CB0} | | 1500 | V |
| Collector-to-Emitter Voltage | V_{CE0} | | 1200 | V |
| Emitter-to-Base Voltage | V_{EBO} | | 5 | V |
| Collector Current | I_C | | 30 | mA |
| Collector Current (Pulse) | I_{CP} | | 100 | mA |
| Collector Dissipation | P_C | | 2 | W |
| Junction Temperature | T_j | | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---------------|---------------------------------------|---------|-----|-----|---------------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CBO} | $V_{CB}=1200\text{V}, I_E=0$ | | | 1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=4\text{V}, I_C=0$ | | | 1 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=5\text{V}, I_C=1.5\text{mA}$ | 10 | | 60 | |
| Gain-Bandwidth Product | f_T | $V_{CE}=10\text{V}, I_C=1.5\text{mA}$ | | 6 | | MHz |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=3\text{mA}, I_B=0.6\text{mA}$ | | | 5 | V |
| Base-to-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=3\text{mA}, I_B=0.6\text{mA}$ | | | 2 | V |
| Collector-to-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=100\mu\text{A}, I_E=0$ | 1500 | | | V |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1\text{mA}, R_{BE}=\infty$ | 1200 | | | V |
| Emitter-to-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=100\mu\text{A}, I_C=0$ | 5 | | | V |

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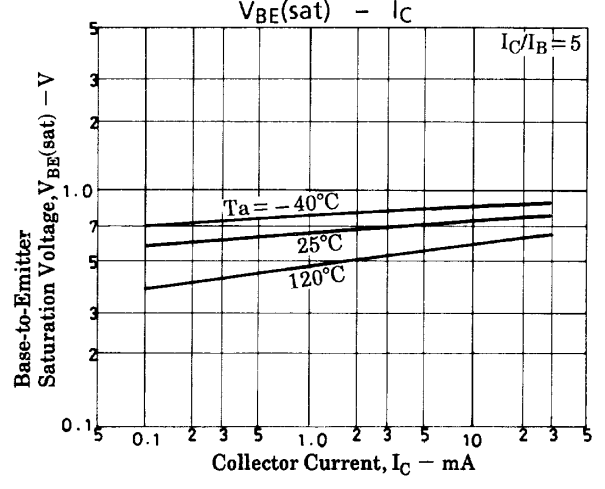
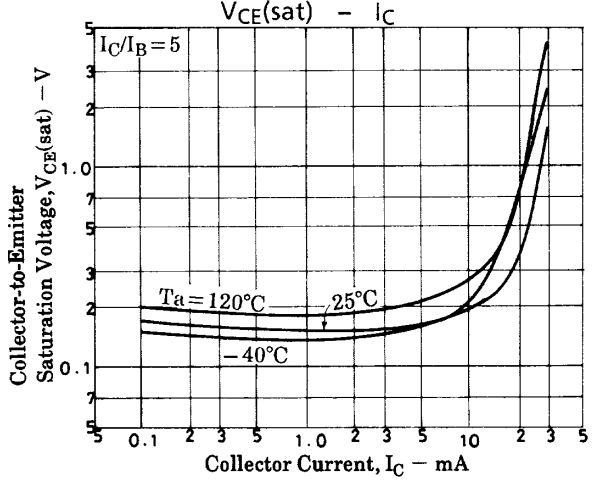
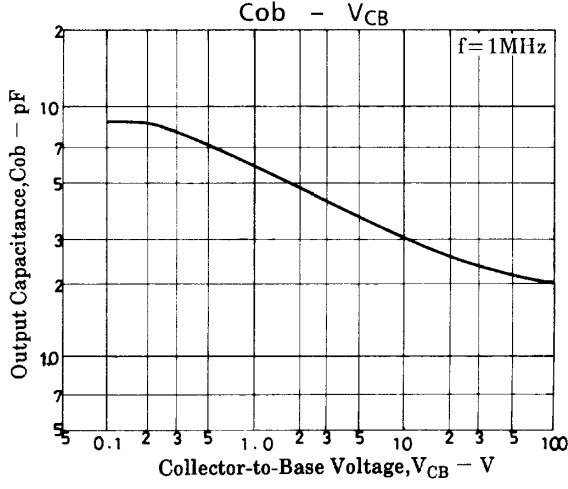
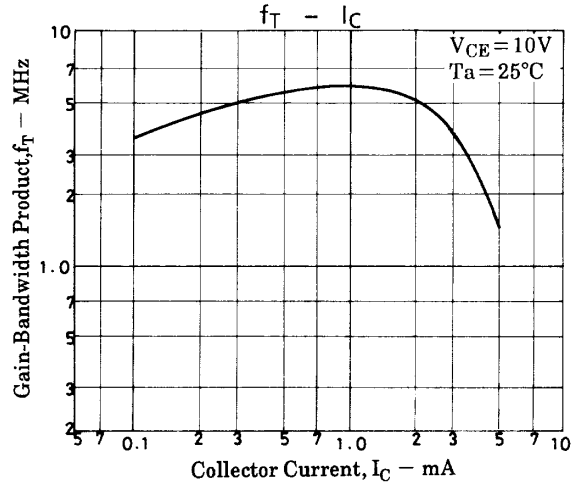
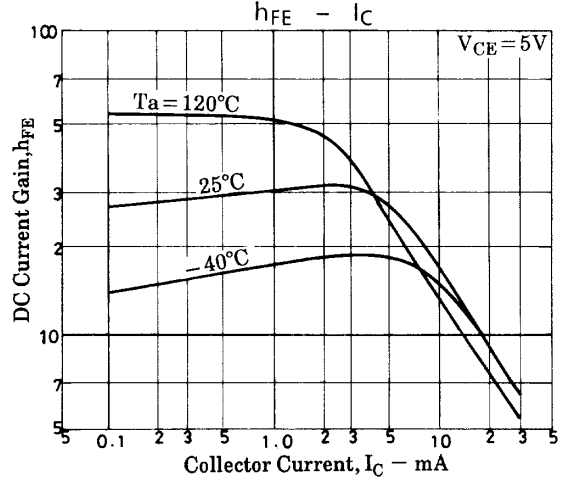
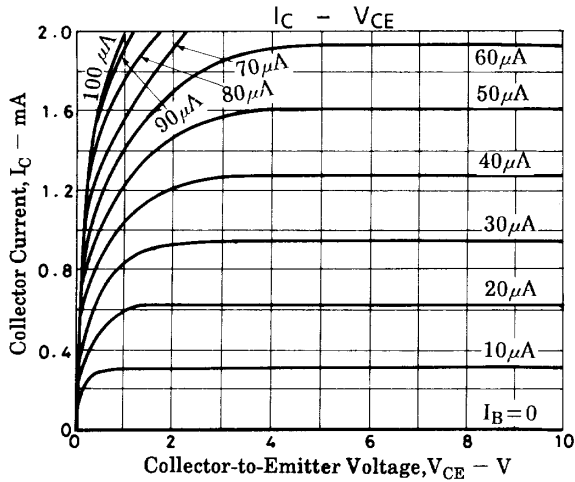
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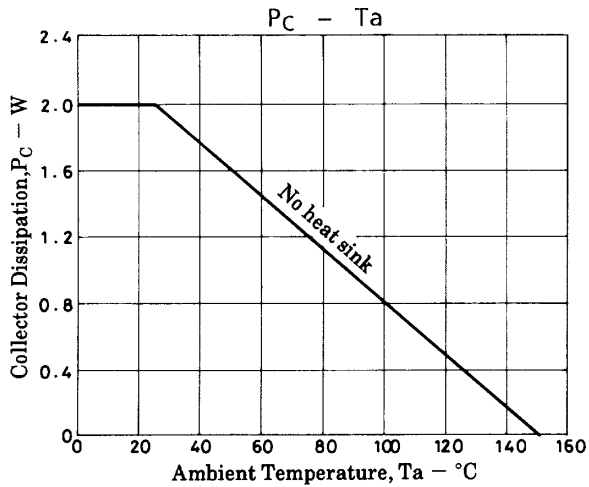
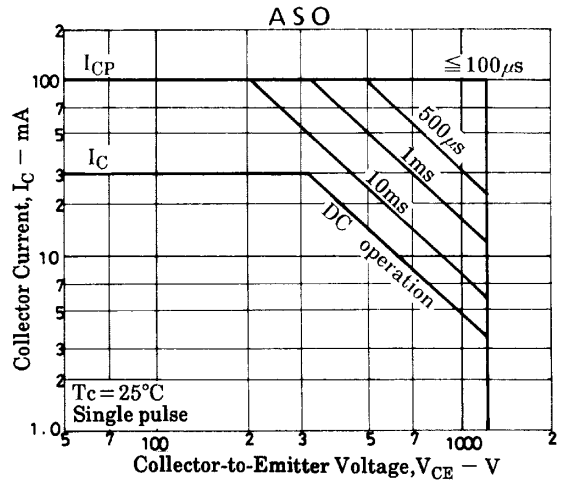
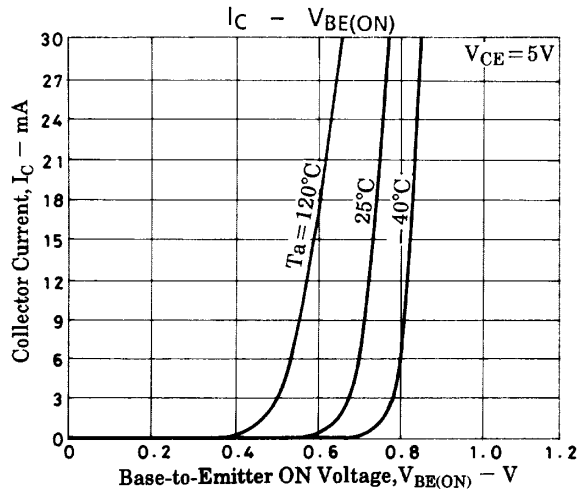
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11599HA (KT)/80296YK (KOTO) TA-0465, AX-7506, 8-6924 No.3702-1/3

2SC4633

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--------------------|--------|-------------------------------|---------|-----|-----|------|
| | | | min | typ | max | |
| Output Capacitance | Cob | V _{CB} =100V, f=1MHz | | 2.0 | | pF |
| Thermal Resistance | Rthj-c | Junction - case | | | 8.3 | °C/W |





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