

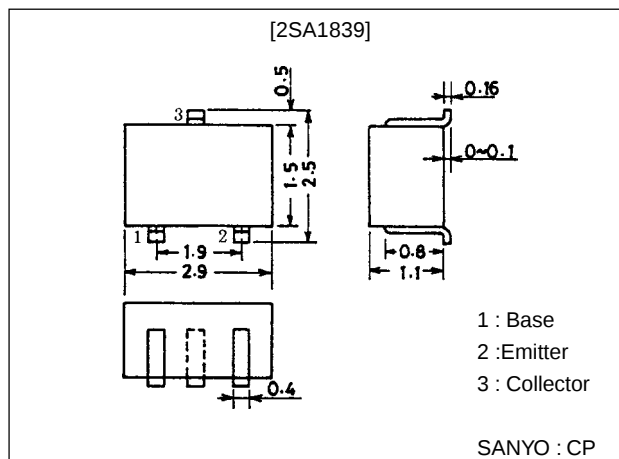
**SANYO****Muting Circuit Applications****Features**

- Very small-sized package permitting 2SA1839-applied sets to be made small and slim.
- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Low ON resistance.

**Package Dimensions**

unit:mm

2018B

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

| Parameter                    | Symbol    | Conditions | Ratings     | Unit |
|------------------------------|-----------|------------|-------------|------|
| Collector-to-Base Voltage    | $V_{CBO}$ |            | -15         | V    |
| Collector-to-Emitter Voltage | $V_{CEO}$ |            | -10         | V    |
| Emitter-to-Base Voltage      | $V_{EBO}$ |            | -5          | V    |
| Collector Current            | $I_C$     |            | -100        | mA   |
| Collector Current (Pulse)    | $I_{CP}$  |            | -200        | mA   |
| Base Current                 | $I_B$     |            | -20         | mA   |
| Collector Dissipation        | $P_C$     |            | 250         | mW   |
| 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                | $I_{CBO}$     | $V_{CB} = -12V, I_E = 0$    |         |       | -0.1  | $\mu A$ |
| Emitter Cutoff Current                  | $I_{EBO}$     | $V_{EB} = -4V, I_C = 0$     |         |       | -0.1  | $\mu A$ |
| DC Current Gain                         | $h_{FE}$      | $V_{CE} = -2V, I_C = -5mA$  | 200     |       | 600   |         |
| Gain-Bandwidth Product                  | $f_T$         | $V_{CE} = -5V, I_C = -10mA$ |         | 600   |       | MHz     |
| Output Capacitance                      | $C_{ob}$      | $V_{CB} = -10V, f = 1MHz$   |         | 0.9   |       | pF      |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -10mA, I_B = -1mA$   |         | -0.04 | -0.15 | V       |
| Base-to-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C = -10mA, I_B = -1mA$   |         | -0.82 | -1.1  | V       |

Marking : LS

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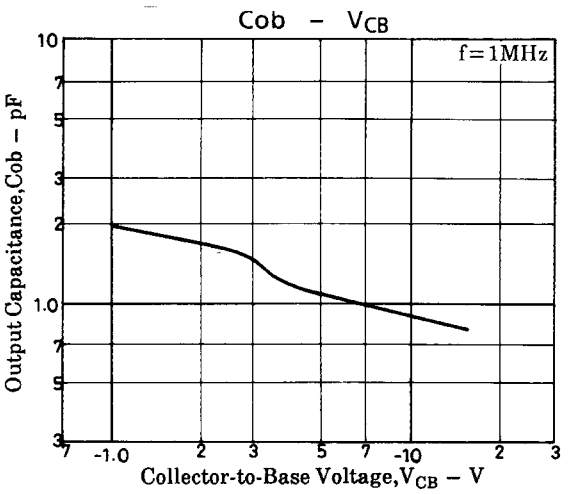
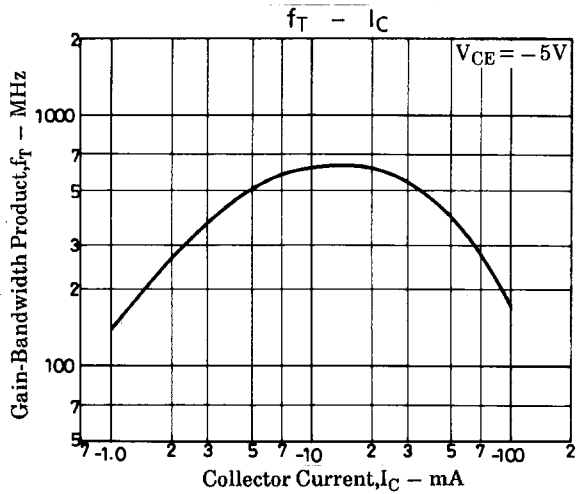
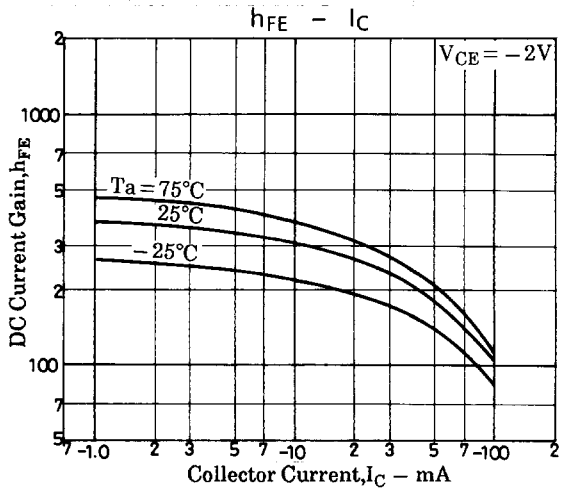
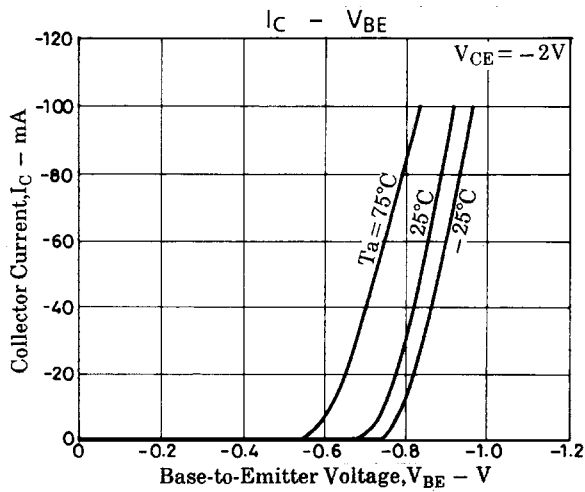
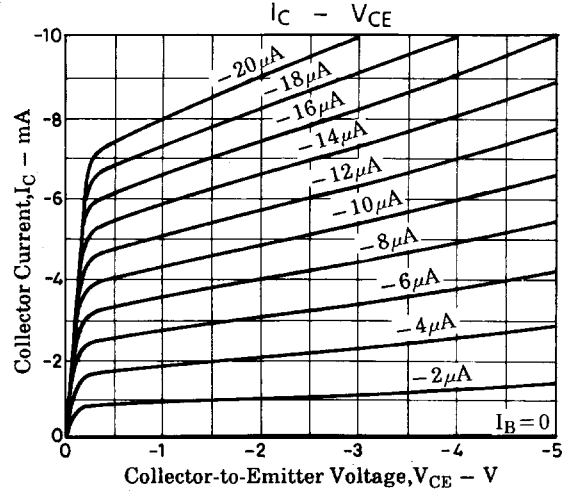
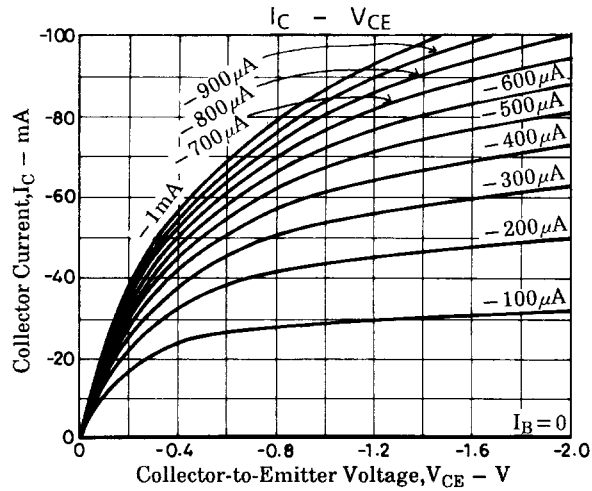
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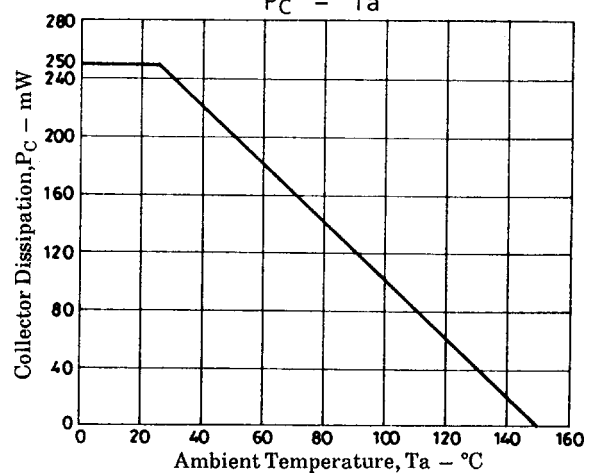
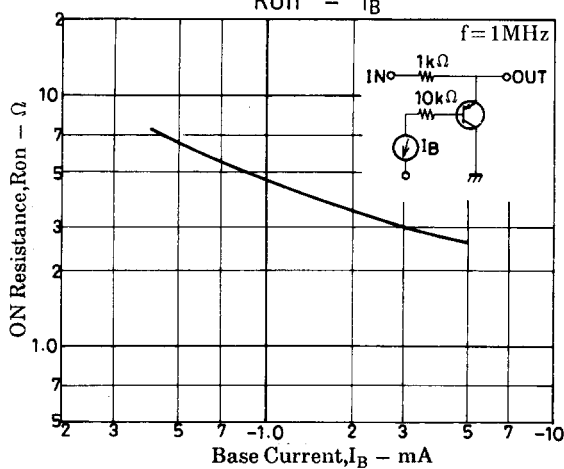
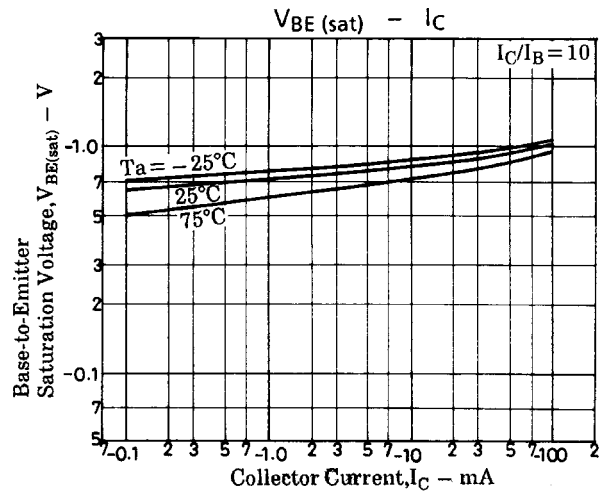
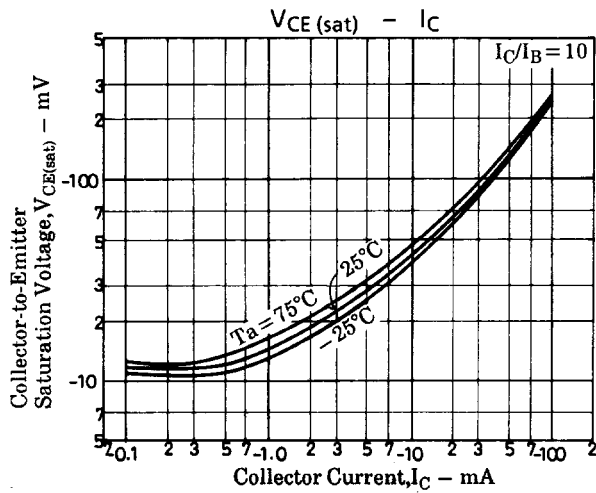
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

91098HA (KT)/82494MT (KOTO) AX-7780 No.4666-1/3

## 2SA1839

| Parameter                              | Symbol        | Conditions                    | Ratings |     |     | Unit     |
|----------------------------------------|---------------|-------------------------------|---------|-----|-----|----------|
|                                        |               |                               | min     | typ | max |          |
| Collector-to-Base Breakdown Voltage    | $V_{(BR)CBO}$ | $I_C = -10\mu A, I_E = 0$     | -15     |     |     | V        |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -1mA, R_{BE} = \infty$ | -10     |     |     | V        |
| Emitter-to-Base Breakdown Voltage      | $V_{(BR)EBO}$ | $I_E = -10\mu A, I_C = 0$     | -5      |     |     | V        |
| On Resistance                          | $R_{on}$      | $I_B = -3mA, f = 1MHz$        |         | 3.0 |     | $\Omega$ |





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