

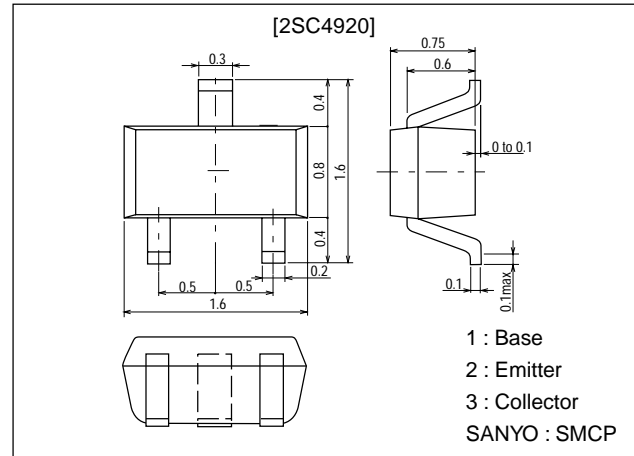
**2SC4920****Muting Circuit, Driver Applications****Features**

- High DC current gain.
- On-chip bias resistance ($R1=4.7k\Omega$, $R2=4.7k\Omega$).
- Very small-sized package permitting 2SC4920-applied sets to be made smaller and slimmer.
- Small ON resistance.

Package Dimensions

unit:mm

2106A

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|------------|-------------|------------------|
| Collector-to-Base Voltage | V_{CB0} | | 25 | V |
| Collector-to-Emitter Voltage | V_{CE0} | | 20 | V |
| Emitter-to-Base Voltage | V_{EB0} | | 10 | V |
| Input Voltage | V_{IN} | | 18 | V |
| Collector Current | I_C | | 100 | mA |
| Collector Current (Pulse) | I_{CP} | | 200 | mA |
| Base Current | I_B | | 20 | mA |
| Collector Dissipation | P_C | | 150 | mW |
| 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} | $V_{CB}=20\text{V}$, $I_E=0$ | | | 0.1 | μA |
| | I_{CEO} | $V_{CE}=15\text{V}$, $I_B=0$ | | | 0.5 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=5\text{V}$, $I_C=0$ | 410 | 532 | 760 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=2\text{V}$, $I_C=20\text{mA}$ | 80 | | | |
| Gain-Bandwidth Product | f_T^* | $V_{CE}=5\text{V}$, $I_C=10\text{mA}$ | | 240 | | MHz |
| Output Capacitance | C_{ob}^* | $V_{CB}=10\text{V}$, $f=1\text{MHz}$ | | 1.4 | | pF |

* Characteristic of the constituent transistor.

Marking : EA

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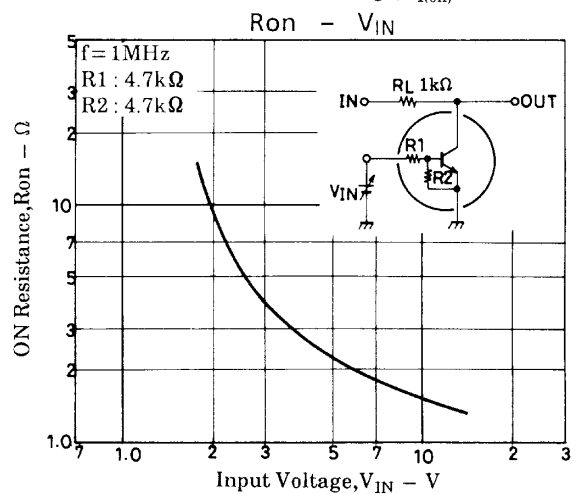
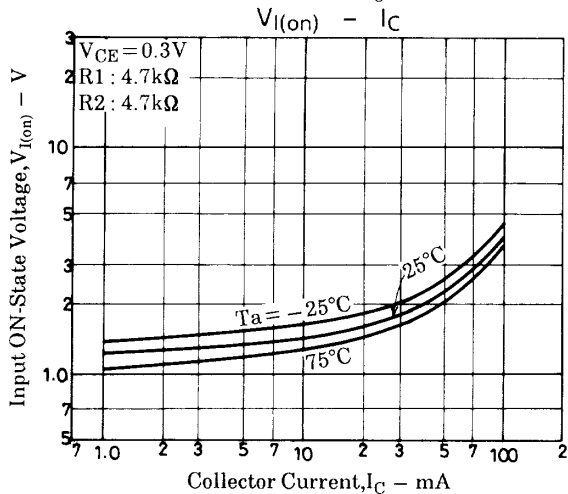
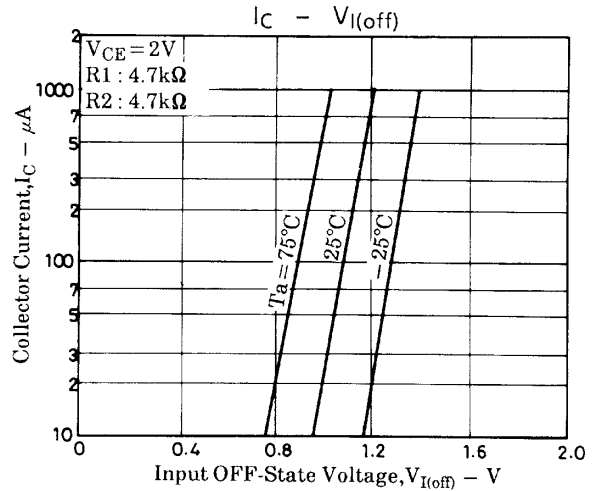
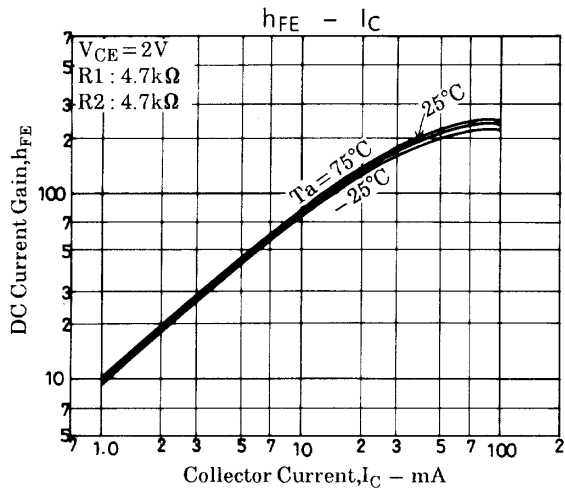
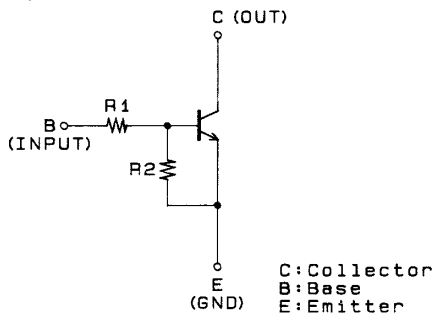
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12599HA (KT)/53094TH (KOTO) AX-9001 No.4766-1/3

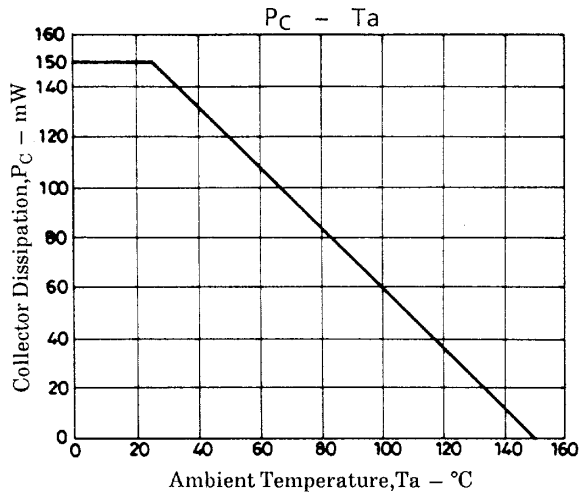
2SC4920

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---------------|---------------------------|---------|-----|-----|------------|
| | | | min | typ | max | |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=5mA, I_B=0.5mA$ | | 10 | 30 | mV |
| Collector-to-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=10\mu A, I_E=0$ | 25 | | | V |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1mA, R_{BE}=\infty$ | 20 | | | V |
| Input OFF-State Voltage | $V_{I(off)}$ | $V_{CE}=2V, I_C=100\mu A$ | 0.7 | 1.1 | 1.4 | V |
| Input ON-State Voltage | $V_{I(on)}$ | $V_{CE}=0.3V, I_C=20mA$ | 1.0 | 1.6 | 3.0 | V |
| Input Resistance | R1 | | 3.3 | 4.7 | 6.1 | k Ω |
| Resistance Ratio | R1/R2 | | 0.9 | 1.0 | 1.1 | |
| ON Resistance | Ron | $V_{IN}=5V, f=1MHz$ | | 2.2 | | Ω |

Electrical Connection



2SC4920



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