

<b>SANYO</b>	No.4766	<b>2SC4920</b>
		NPN Epitaxial Planar Silicon Transistor

**Muting Circuit, Driver Applications**

**Features**

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

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

			unit
Collector-to-Base Voltage	V <sub>CB0</sub>	25	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>	20	V
Emitter-to-Base Voltage	V <sub>EBO</sub>	10	V
Input Voltage	V <sub>IN</sub>	18	V
Collector Current	I <sub>C</sub>	100	mA
Collector Current (Pulse)	I <sub>CP</sub>	200	mA
Base Current	I <sub>B</sub>	20	mA
Collector Dissipation	P <sub>C</sub>	150	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

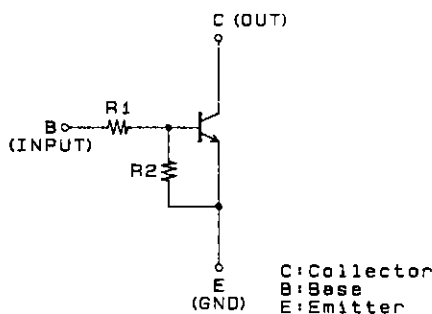
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> = 20V, I <sub>E</sub> = 0			0.1	μA
Collector Cutoff Current	I <sub>CEO</sub>	V <sub>CE</sub> = 15V, I <sub>B</sub> = 0			0.5	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0	410	532	760	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 20mA	80			
Gain-Bandwidth Product	f <sub>T</sub> *	V <sub>CE</sub> = 5V, I <sub>C</sub> = 10mA		240		MHz
Output Capacitance	C <sub>ob</sub> *	V <sub>CB</sub> = 10V, f = 1MHz		1.4		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 5mA, I <sub>B</sub> = 0.5mA		10	30	mV
C-B Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 10μA, I <sub>E</sub> = 0	25			V
C-E Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, R <sub>BE</sub> = ∞	20			V
Input OFF-State Voltage	V <sub>I(off)</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 100μA	0.7	1.1	1.4	V
Input ON-State Voltage	V <sub>I(on)</sub>	V <sub>CE</sub> = 0.3V, I <sub>C</sub> = 20mA	1.0	1.6	3.0	V
Input Resistance	R <sub>1</sub>		3.3	4.7	6.1	kΩ
Resistance Ratio	R <sub>1/R2</sub>		0.9	1.0	1.1	
ON Resistance	R <sub>on</sub>	V <sub>IN</sub> = 5V, f = 1MHz		2.2		Ω

\* Characteristic of the constituent transistor.

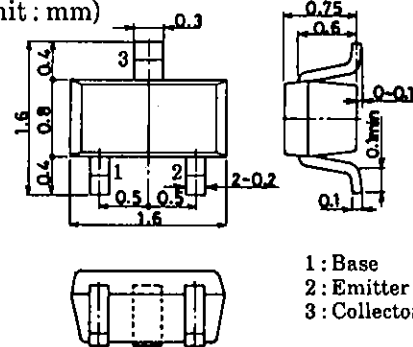
Marking: EA

**Electrical Connection**



**Package Dimensions 2106A**

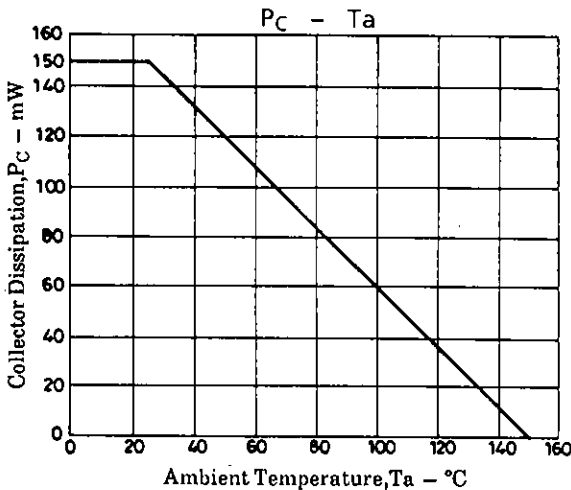
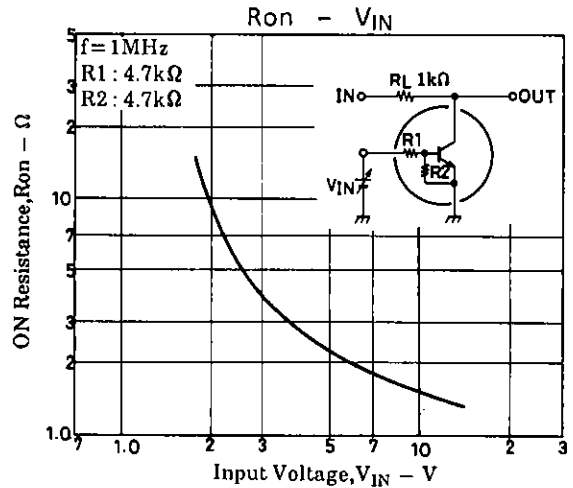
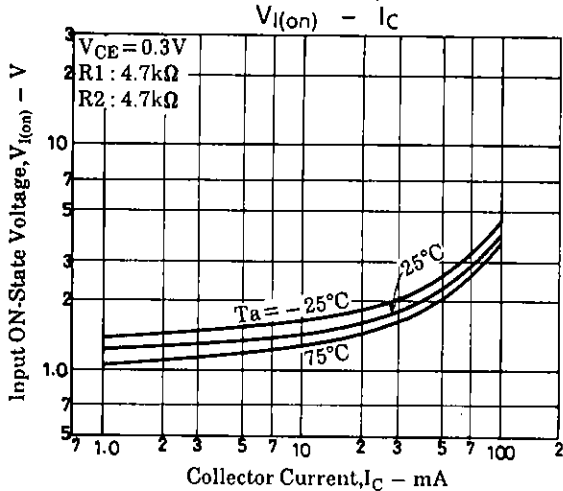
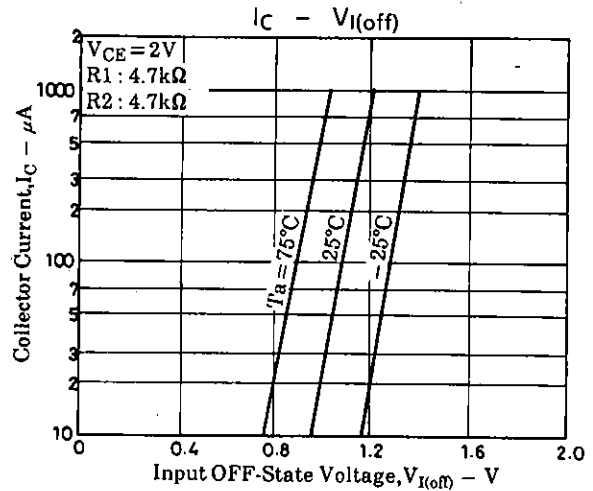
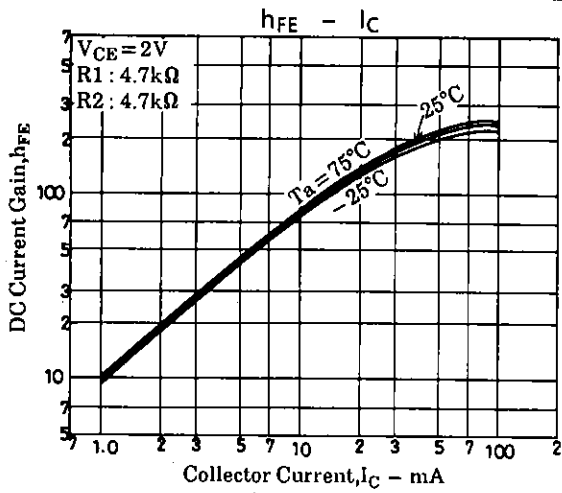
(unit: mm)



SANYO: SMCP

**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

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



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