

**SANYO**

No.4721

**2SA1866**

PNP Epitaxial Planar Silicon Transistor

Muting Circuits, Driver Applications

**Features**

- On-chip bias resistors (R1 = 47kΩ, R2 = 47kΩ).
- Very small-sized package making 2SA1866-applied sets small and slim.
- Small ON resistance.
- High gain-bandwidth product  $f_T$ .

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

			unit
Collector-to-Base Voltage	V <sub>CB0</sub>	-15	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>	-15	V
Emitter-to-Base Voltage	V <sub>EBO</sub>	-10	V
Input Voltage	V <sub>IN</sub>	-14	V
Collector Current	I <sub>C</sub>	-50	mA
Collector Current (Pulse)	I <sub>CP</sub>	-100	mA
Base Current	I <sub>B</sub>	-10	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

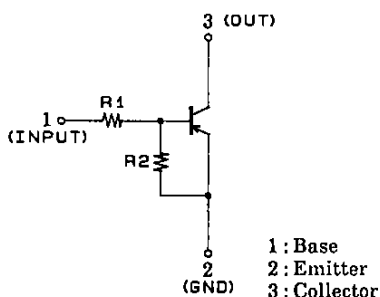
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0			-0.1	μA
Collector Cutoff Current	I <sub>CEO</sub>	V <sub>CE</sub> = -10V, 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	-30	-53	-80	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -5mA	100			
Gain-Bandwidth Product	f <sub>T</sub> ※	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA		600		MHz
Output Capacitance	C <sub>ob</sub> ※	V <sub>CB</sub> = -10V, f = 1MHz		0.9		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -2mA, I <sub>B</sub> = -0.2mA		-20	-60	mV
C-B Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> = 0	-15			V
C-E Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -1mA, R <sub>BE</sub> = ∞	-15			V
Input OFF-State Voltage	V <sub>IN(off)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -100μA	-0.8	-1.2	-1.5	V
Input ON-State Voltage	V <sub>IN(on)</sub>	V <sub>CE</sub> = -0.3V, I <sub>C</sub> = -5mA	-1.0	-2.3	-4.0	V
Input Resistance	R <sub>1</sub>		32	47	62	kΩ
Resistance Ratio	R <sub>1/R2</sub>		0.9	1.0	1.1	
ON Resistance	R <sub>on</sub>	V <sub>IN</sub> = -10V, f = 1MHz		10.0		Ω

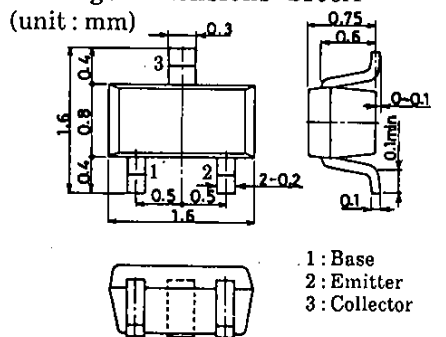
※ : Characteristic of the constituent transistor.

Marking : CA

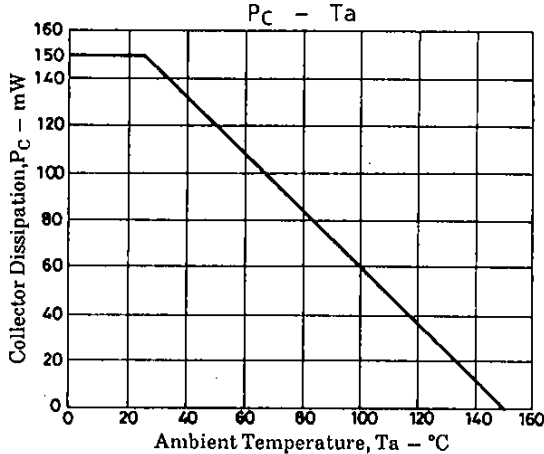
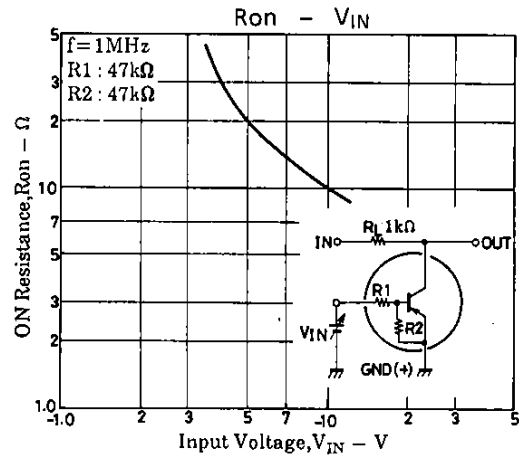
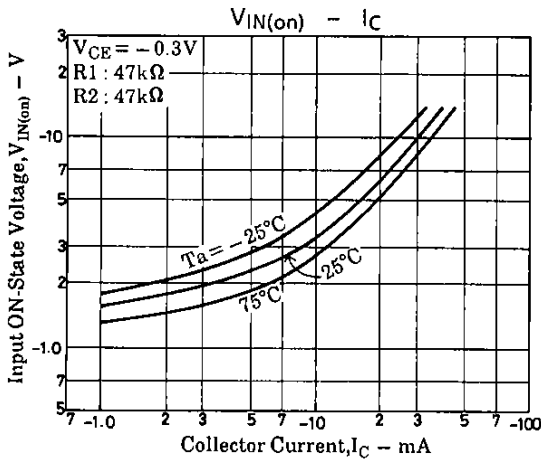
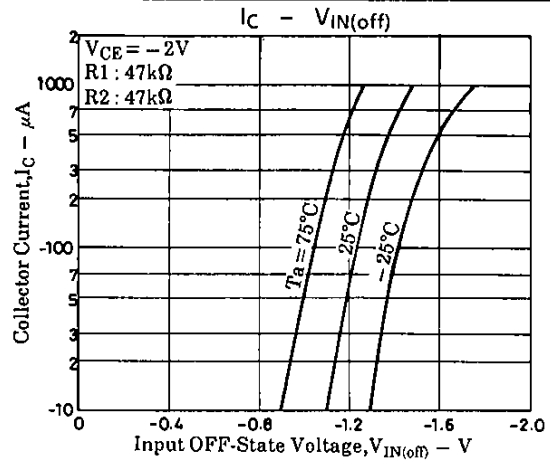
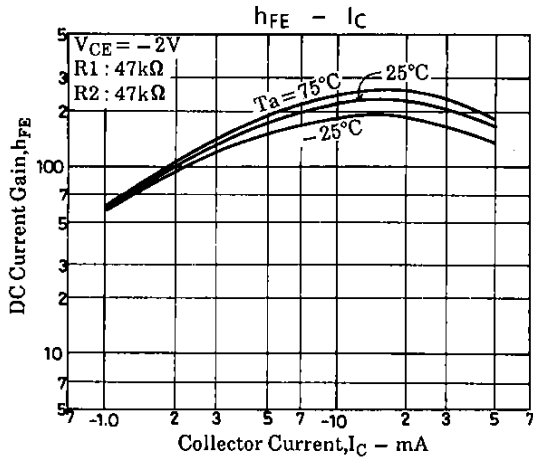
**Electrical Connection**



**Package Dimensions 2106A**



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