

<b>SANYO</b>	No.4719	<b>2SA1864</b>
	PNP Epitaxial Planar Silicon Transistor	
<b>Muting Circuits, Driver Applications</b>		

**Features**

- On-chip bias resistors (R1 = 4.7kΩ, R2 = 4.7kΩ).
- Very small-sized package making 2SA1864-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>	-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	

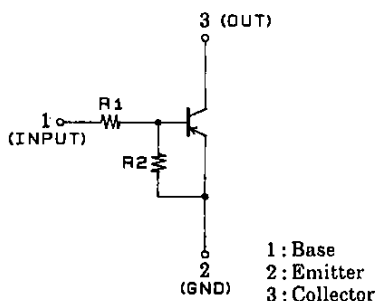
**Electrical Characteristics at Ta = 25°C**

					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	-410	-532	-760	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -20mA	50			
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> = -5mA, I <sub>B</sub> = -0.5mA	-30	-100	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> = -20mA	-1.0	-2.1	-4.0	V
Input Resistance	R <sub>I</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	5.0			Ω

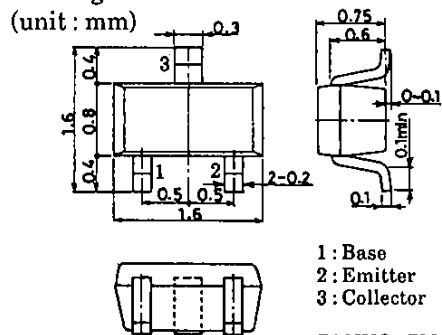
\* † : Characteristic of the constituent transistor.

Marking: AA

**Electrical Connection**



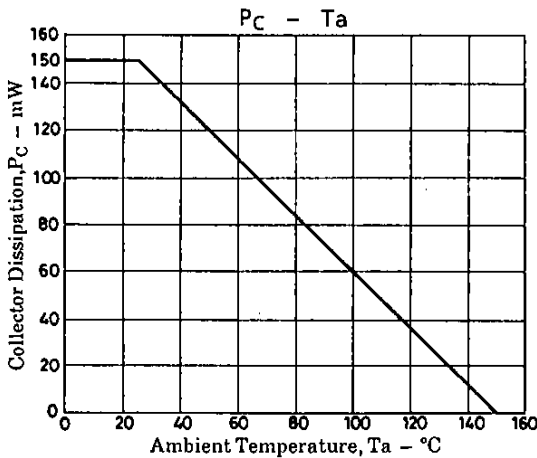
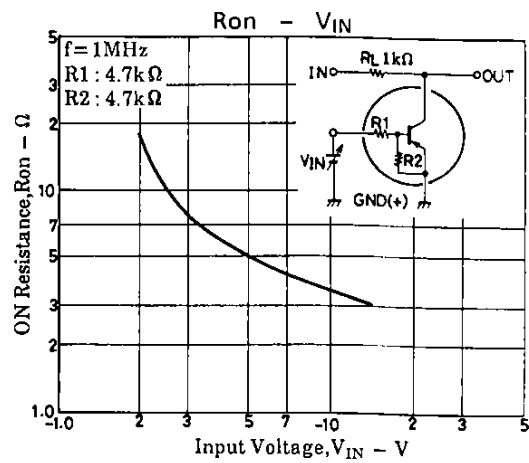
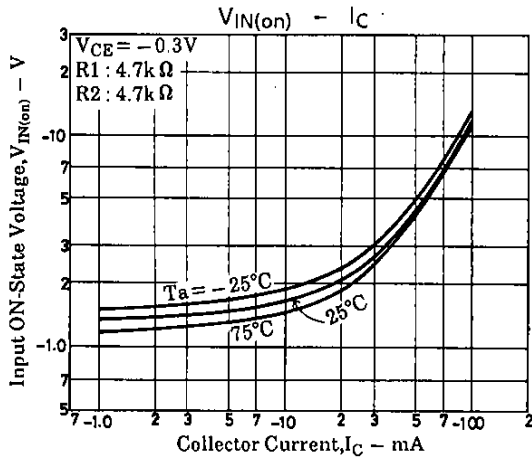
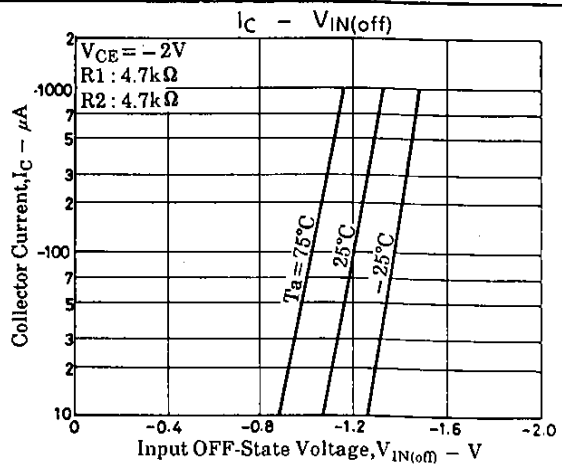
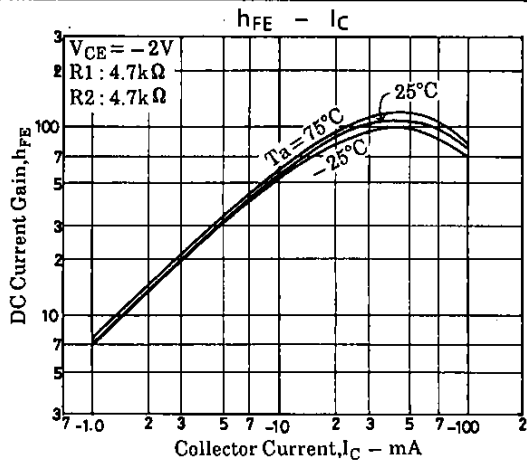
**Package Dimensions 2106A**



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