Ordering number:4721

PNP Epitaxial Planar Silicon Transistor

2SA1866

Muting Circuits, Driver Applications

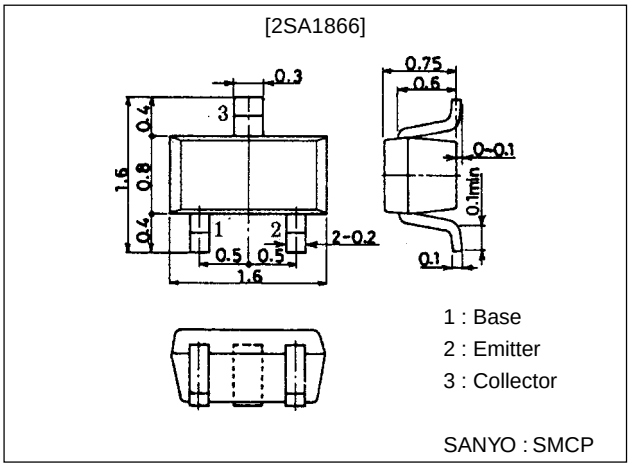
Features

- 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.

Package Dimensions

unit:mm

2106A



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbo	Condition	Rating	Uni
Collector-to-Base Voltage	CBO		–15	
Collector-to-Emitter Voltage	CEO		–15	
Emitter-to-Base Voltage	EBO		–10	
Input Voltage	IN		–14	
Collector Current	C		–50	m
Collector Current (Pulse)	CP		–200	m
Base Current	B		–20	m
Collector Dissipation	C		150	m
Junction Temperature	T		150	˚C
Storage Temperature	Tst		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbo	Condition	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	CBO	V_{CB}=–10V, I_E=0			–0.1	µ
Collector Cutoff Current	CEO	V_{CE}=–10V, I_B=0			–0.1	µ
Emitter Cutoff Current	EBO	V_{EB}=–5V, I_C=0	–3	–5	–8	µ
DC Current Gain	FE	V_{CE}=–2V, I_C=–5mA	10			
Gain-Bandwidth Product	T*	V_{CE}=–5V, I_C=–10mA		620		MH
Output Capacitance	ob*	V_{CB}=–10V, f=1MHz		0F		p

* : Charactersistic of the constituent transistor.

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=–2mA, I_B=–0.2mA		–20	–60	mV
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=–10μA, I_E=0	–15			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=–1mA, R_{BE}=∞	–15			V
Input OFF-State Voltage	$I_{N(off)}$	V_{CE}=–2V, I_C=–100μA	–0.2	–0.5	–1.0	V
Input ON-State Voltage	$I_{N(on)}$	V_{CE}=–0.3V, I_C=–5mA	–1.3	–2.0	–3.0	V
Input Resistance	R2		37	42	6k	Ω
Resistance Ratio	R2/R1		0.0	0.1	0.1	
ON Resistance	R_{on}	V_{IN}=–0.10V, f=1MHz		10.		Ω

Marking : CA

Electrical Connection