

No.4767

2SC4921

NPN Epitaxial Planar Silicon Transistor

Muting Circuit, Driver Applications

Features

- · High DC current gain.
- · On-chip bias resistance (R1 = $10k\Omega$, R2 = $10k\Omega$)
- · Very small-sized package permitting 2SC4921-applied sets to be made smaller and slimmer.
- · Small ON resistance.

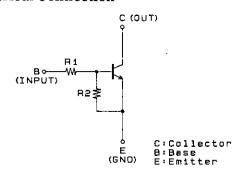
Absolute Maximum Ratings at Ta = 25°C						unit
Collector-to-Base Voltage	$\rm v_{cbo}$				25	V
Collector-to-Emitter Voltage					20	V
Emitter-to-Base Voltage	V_{EBO}				10	V
Input Voltage	V_{IN}				18	V
Collector Current	$I_{\mathbf{C}}$				100	mA
Collector Current (Pulse)	I_{CP}				200	mA
Base Current	$I_{\mathbf{B}}$				20	mA
Collector Dissipation	$\mathbf{P}_{\mathbf{C}}$				150	mW
Junction Temperature	Tj				150	$^{\circ}\mathrm{C}$
Storage Temperature	Tstg		-55 to +150		$^{\circ}\mathrm{C}$	
Electrical Characteristics at Ta = 25°C			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			0.1	μ A
Collector Cutoff Current	I_{CEO}	$V_{CE} = 15V, I_{B} = 0$			0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	195	25 0	360	μ A
DC Current Gain	$\mathbf{h_{FE}}$	$V_{CE} = 2V, I_C = 10 \text{mA}$	100			•
Gain-Bandwidth Product	$\mathbf{f_T}^*$	$V_{CE} = 5V, I_C = 10mA$		240		MHz
Output Capacitance	Cob*	$V_{CB} = 10V, f = 1MHz$		1.4		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 2.5 \text{mA}, I_B = 0.25 \text{mA}$		10	30	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1 \text{mA,R}_{BE} = \infty$	20			V
Input OFF-State Voltage	$V_{I(off)}$	$V_{\rm CE}=2V$, $I_{\rm C}=100\mu{\rm A}$	0.7	1.1	1.4	V
Input ON-State Voltage	V _{I(on)}	$V_{CE} = 0.3 V, I_{C} = 10 mA$	1.0	1.5	3.0	V
Input Resistance	R1		7.0	10	13	$\mathbf{k}\Omega$
Resistance Ratio	R1/R2		0.9	1.0	1.1	

* Characteristic of the constituent transistor.

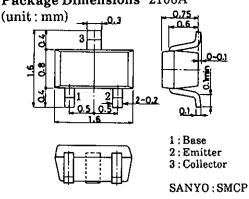
Marking: FA

ON Resistance

Electrical Connection



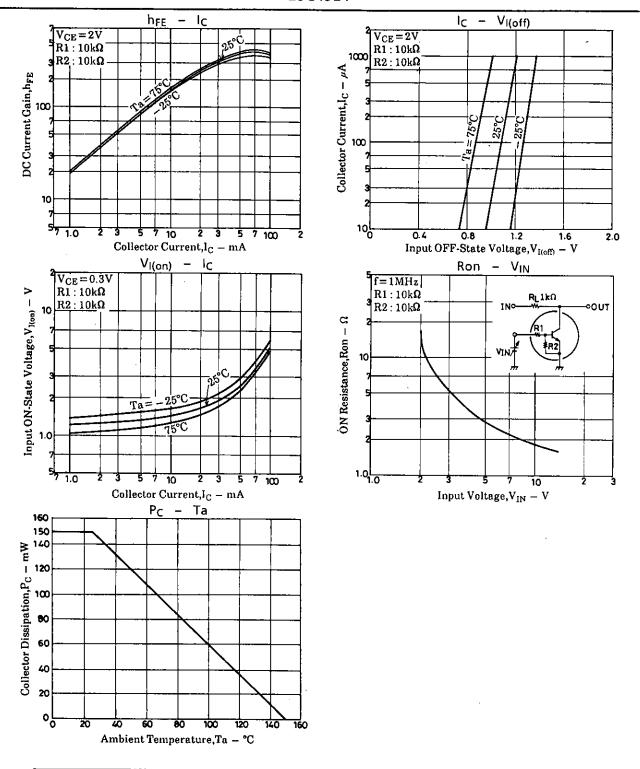
Package Dimensions 2106A



2.8

Ω

 $V_{IN} = 5V, f = 1MHz$



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