

No.4768

NPN Epitaxial Planar Silicon Transistor

Muting Circuit, Driver Applications

Features

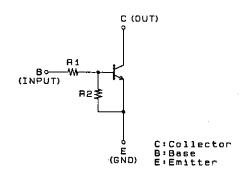
- · High DC current gain.
- On-chip bias resistance (R1 = $47k\Omega$, R2 = $47k\Omega$)
- · Very small-sized package permitting 2SC4922-applied sets to be made smaller and slimmer.
- · Small ON resistance.

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	$\mathbf{I}_{\mathbf{C}}$				100	mA
Collector Current (Pulse)	I_{CP}				200	mΑ
Base Current	$I_{\mathbf{B}}$				20	mA
Collector Dissipation	$\mathbf{P}_{\mathbf{C}}$				150	\mathbf{mW}
Junction Temperature	Тj				150	$^{\circ}\mathrm{C}$
Storage Temperature	Tstg		-55 to +150		°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	μ A
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	30	53	80	μ A
DC Current Gain	$h_{ m FE}$	$V_{CE} = 2V, I_C = 5mA$	200			·
Gain-Bandwidth Product	f_T^*	$V_{CE} = 5V, I_{C} = 10mA$		240		MHz
Output Capacitance	Cob*	$V_{CB} = 10V, f = 1MHz$		1.4		рF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 2mA, I_B = 0.2mA$		10	30	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10 \mu A, I_E = 0$	2 5			V
C-E Breakdown Voltage	V _{(BR)CEO}	$I_C = 1 \text{mA}, R_{BE} = \infty$	20			V
Input OFF-State Voltage	$V_{I(off)}$	$V_{CE} = 2V, I_{C} = 100 \mu A$	0.7	1.0	1.4	V
Input ON-State Voltage	$V_{I(on)}$	$V_{CE} = 0.3V, I_C = 5mA$	1.0	1.5	3.0	V
Input Resistance	R1	-	32	47	62	$\mathbf{k}\Omega$
Resistance Ratio	R1/R2		0.9	1.0	1.1	
ON Resistance	Ron	$V_{IN} = 10V, f = 1MHz$		4.0		Ω
4.00						

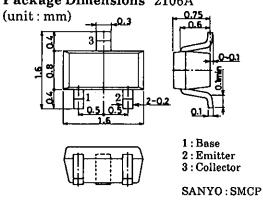
* Characteristic of the constituent transistor.

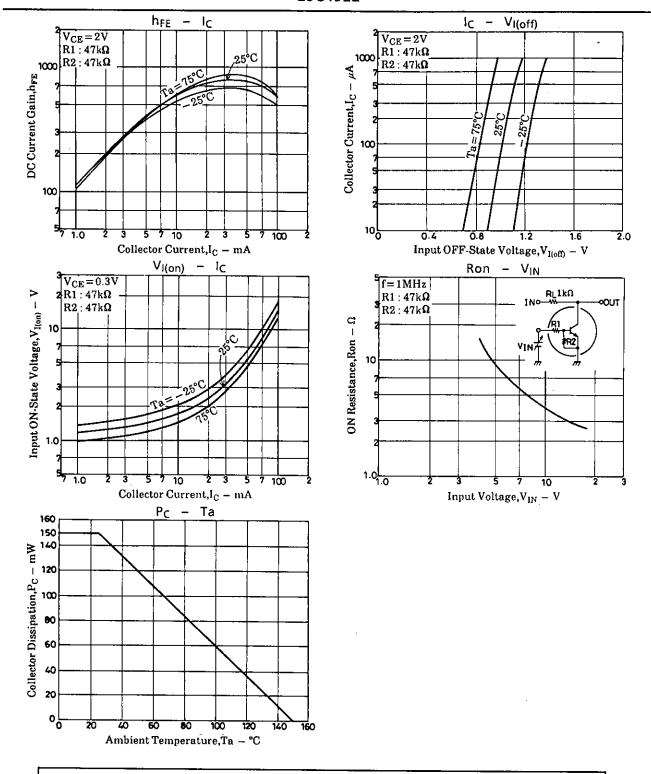
Marking: GA

Electrical Connection



Package Dimensions 2106A





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