NPN Epitaxial Planar Silicon Transistor



2SC4921

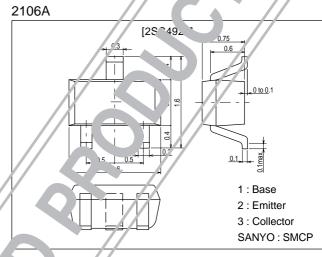
Muting Circuit, Driver Applications

Features

- · High DC current gain.
- \cdot On-chip bias resistance (R1=10k\Omega, R2=10k\Omega).
- Very small-sized package permitting 2SC4921applied sets to be made smaller and slimmer.
- · Small ON resistance.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCPO		25	V
Collector-to-Emitter Voltage	VCED		20	V
Emitter-to-Base Voltage	VF_BO		10	V
Input Voltage	VIN		18	V
Collector Current	IC		100	mA
Collector Current (Pulse)	ICo		200	mA
Base Current	'B		20	mA
Collector Dissipation	°C		150	mW
Junction Temperature	- I,	7	150	°C
Storage Temperature	Tstg	í	–55 to +150	°C

Electrical Characteristics at Ta 75 C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Collector Cutoff Currer.	ICFO	V _{CB} =20V, I _E =0			0.1	μA
	I CEO	V _{CE} =15V, I _B =0			0.5	μA
Emitter Cutoff Cu rent	Ir_BO	V _{EB} =5V, I _C =0	195	250	360	μA
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =10mA	100			
Gain-Bandwidth Product	f _T *	V _{CE} =5V, I _C =10mA		240		MHz
Output Capacitance	Cob*	V _{CB} =10V, f=1MHz		1.4		pF

* Characteristic of ... titu t transistor

Marking . FA

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Parameter	Symbol	Conditions	Ratings			Unit
	Gymbol		min	typ	max	Onit
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =2.5mA, I _B =0.25mA		10	30	mV
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =10µA, I _E =0	25			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	20			V
Input OFF-State Voltage	V _{I(off)}	V _{CE} =2V, I _C =100µA	0.7	1.1	1.4	V
Input ON-State Voltage	V _{I(on)}	V _{CE} =0.3V, I _C =10mA	1.0	15	3.0	V
Input Resistance	R1		7.0	10	13	kΩ
Resistance Ratio	R1/R2		0.9	1.0	1.1	
ON Resistance	Ron	V _{IN} =5V, f=1MHz		2.8		Ω

Electrical Connection

