Ordering number: EN 4766

SANYO

No.4766

2SC4920

NPN Epitaxial Planar Silicon Transistor

Muting Circuit, Driver Applications

Features

- High DC current gain.
- On-chip bias resistance (R1 = 4.7kΩ, R2 = 4.7kΩ)
- Very small-sized package permitting 2SC4920-applied sets to be made smaller and slimmer.
- Small ON resistance.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V_{CBO}	25	V
Collector-to-Emitter Voltage	V_{CEO}	20	V
Emitter-to-Base Voltage	V_{EBO}	10	V
Input Voltage	V_{IN}	18	V
Collector Current	I_C	100	mA
Collector Current (Pulse)	I_{CP}	200	mA
Base Current	I_B	20	mA
Collector Dissipation	P_C	150	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

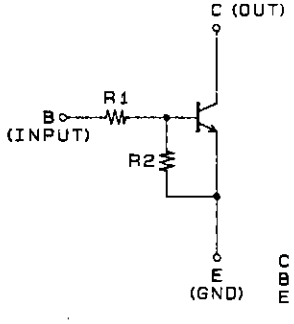
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 20V, I_E = 0			0.1	μA
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	410	532	760	μA
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 20mA	80			
Gain-Bandwidth Product	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 = 5mA, I_B = 0.5mA		10	30	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	25			V
C-E 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 = 20mA	1.0	1.6	3.0	V
Input Resistance	R1		3.3	4.7	6.1	kΩ
Resistance Ratio	R1/R2		0.9	1.0	1.1	
ON Resistance	Ron	V_{IN} = 5V, f = 1MHz		2.2		Ω

* Characteristic of the constituent transistor.

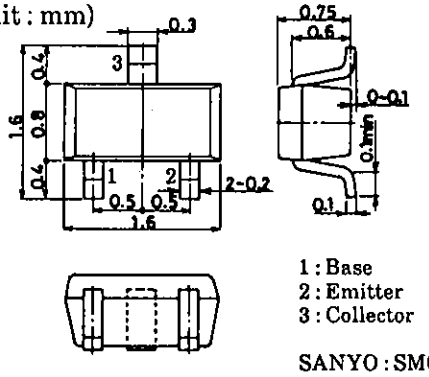
Marking : EA

Electrical Connection



Package Dimensions 2106A

(unit : mm)



1 : Base
2 : Emitter
3 : Collector

SANYO : SMCP

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