

SANYO

No.4766

2SC4920

NPN Epitaxial Planar Silicon Transistor

Muting Circuit, Driver Applications

Features

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

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

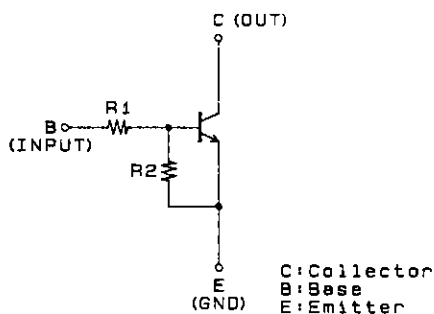
			unit
Collector-to-Base Voltage	V_{CB0}	25	V
Collector-to-Emitter Voltage	V_{CEO}	20	V
Emitter-to-Base Voltage	V_{EBO}	10	V
Input Voltage	V_{IN}	18	V
Collector Current	I_C	100	mA
Collector Current (Pulse)	I_{CP}	200	mA
Base Current	I_B	20	mA
Collector Dissipation	P_C	150	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

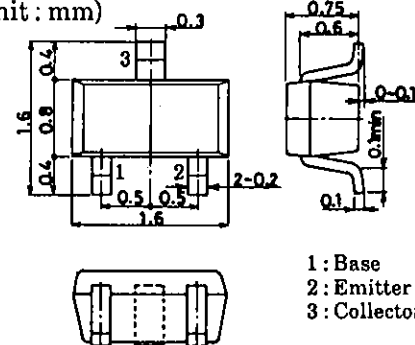
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20\text{V}, I_E = 0$			0.1	μA
Collector Cutoff Current	I_{CEO}	$V_{CE} = 15\text{V}, I_B = 0$			0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	410	532	760	μA
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 20\text{mA}$	80			
Gain-Bandwidth Product	f_T^*	$V_{CE} = 5\text{V}, I_C = 10\text{mA}$		240		MHz
Output Capacitance	C_{ob}^*	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		1.4		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 5\text{mA}, I_B = 0.5\text{mA}$		10	30	mV
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$	20			V
Input OFF-State Voltage	$V_{I(off)}$	$V_{CE} = 2\text{V}, I_C = 100\mu\text{A}$	0.7	1.1	1.4	V
Input ON-State Voltage	$V_{I(on)}$	$V_{CE} = 0.3\text{V}, I_C = 20\text{mA}$	1.0	1.6	3.0	V
Input Resistance	$R1$		3.3	4.7	6.1	k Ω
Resistance Ratio	$R1/R2$		0.9	1.0	1.1	
ON Resistance	R_{on}	$V_{IN} = 5\text{V}, f = 1\text{MHz}$		2.2		Ω

* Characteristic of the constituent transistor.

Marking: EA

Electrical Connection**Package Dimensions 2106A**

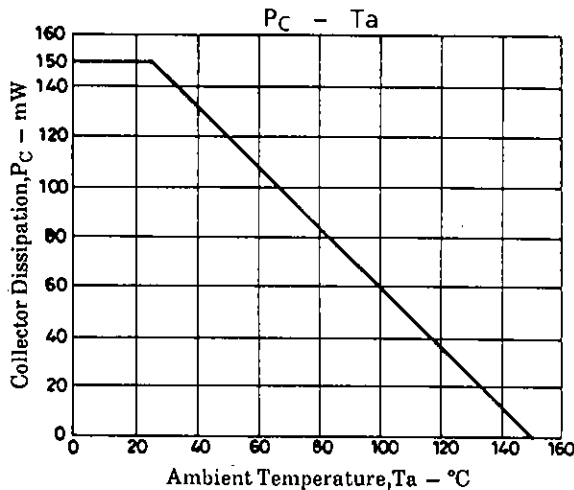
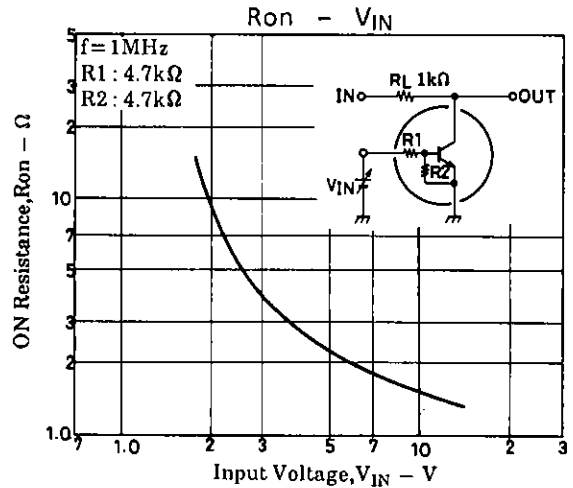
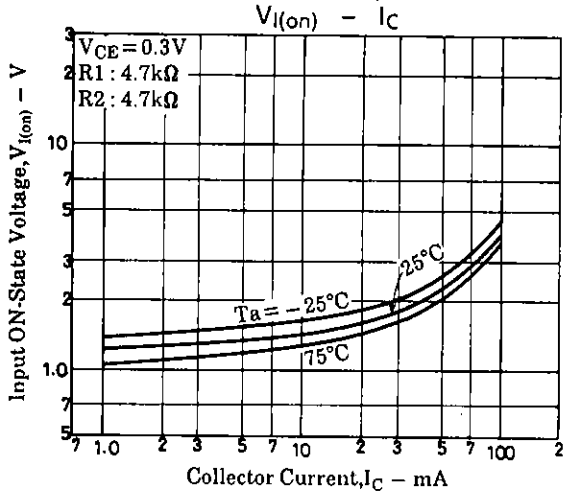
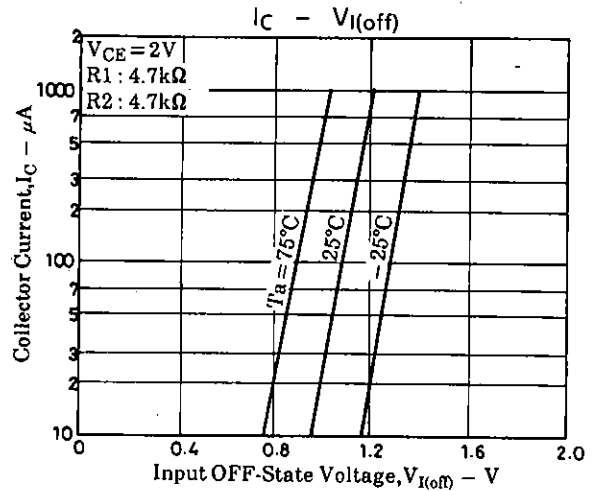
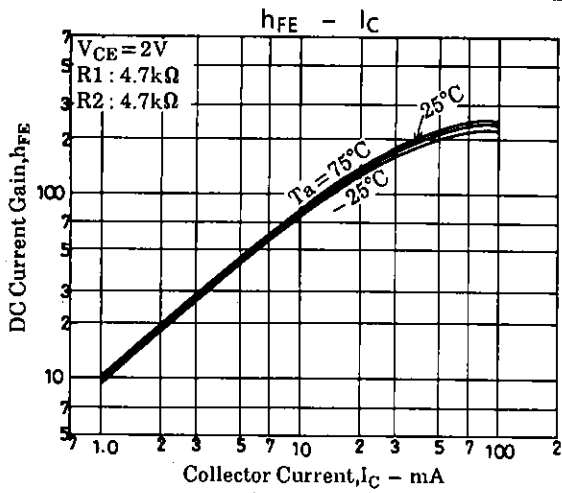
(unit: mm)



SANYO: SMCP

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