

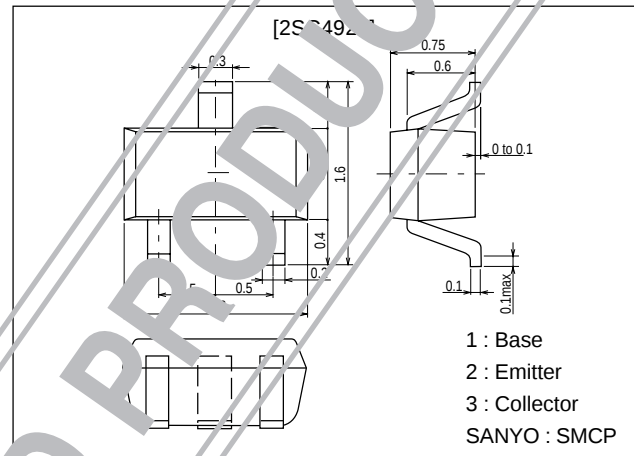
SANYO**2SC4920****Muting Circuit, Driver Applications****Features**

- High DC current gain.
- On-chip bias resistance ($R_1=4.7k\Omega$, $R_2=4.7k\Omega$).
- Very small-sized package permitting 2SC4920-applied sets to be made smaller and slimmer.
- Small ON resistance.

Package Dimensions

unit:mm

2106A

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		25	V
Collector-to-Emitter Voltage	V_{CE0}		20	V
Emitter-to-Base Voltage	V_{EB0}		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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CEO}	$V_{CB}=20\text{V}$, $I_E=0$			0.1	μA
	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

* Characteristic of the constituent transistor.
Marking: EA

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SANYO Electric Co.,Ltd. Semiconductor Business Headquarters

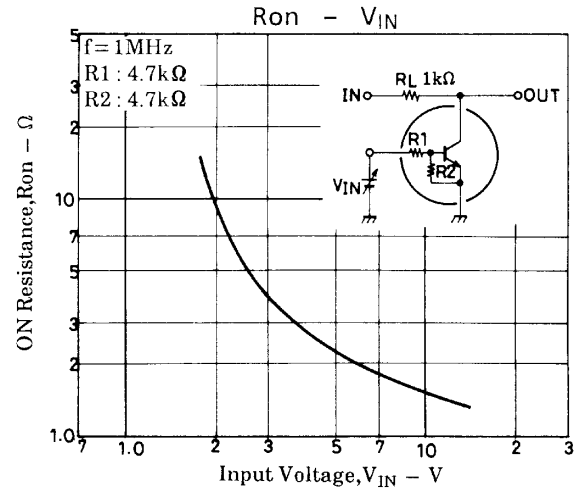
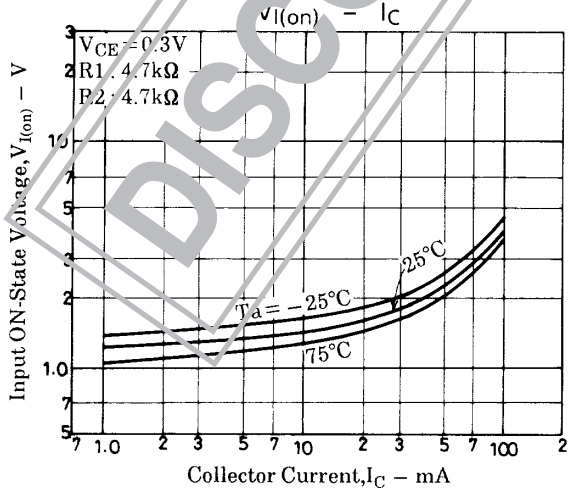
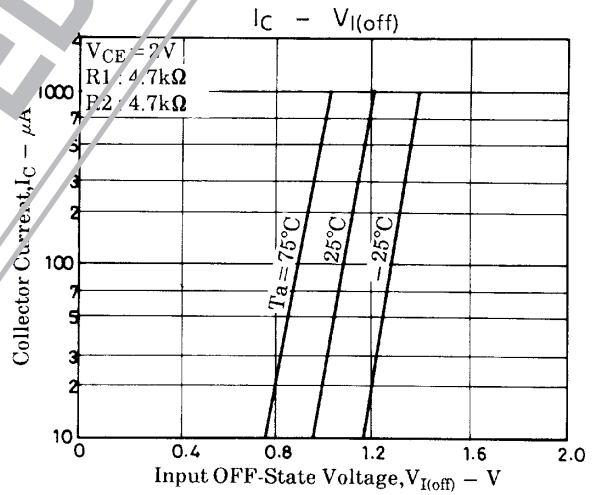
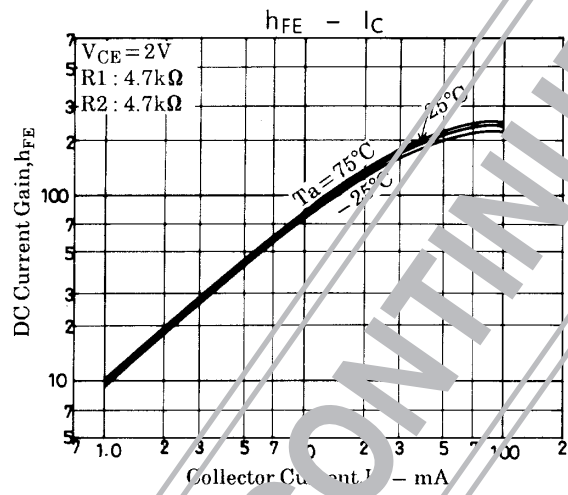
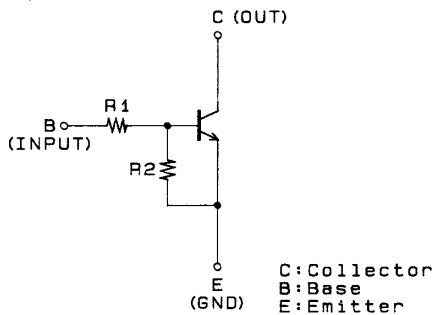
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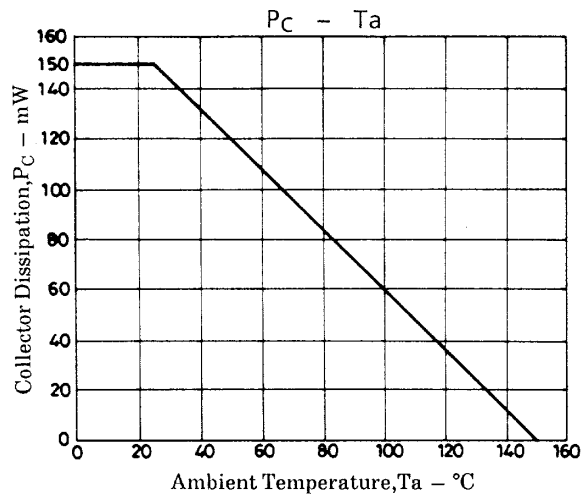
12599HA (KT)/53094TH (KOTO) AX-9001 No.4766-1/3

2SC4920

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5mA, I_B=0.5mA$		10	30	mV
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	25			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20			V
Input OFF-State Voltage	$V_{I(off)}$	$V_{CE}=2V, I_C=100\mu A$	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	k Ω
Resistance Ratio	R1/R2		0.9	1.0	1.1	
ON Resistance	Ron	$V_{IN}=5V, f=1MHz$		2.2		Ω

Electrical Connection





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