

AN3912

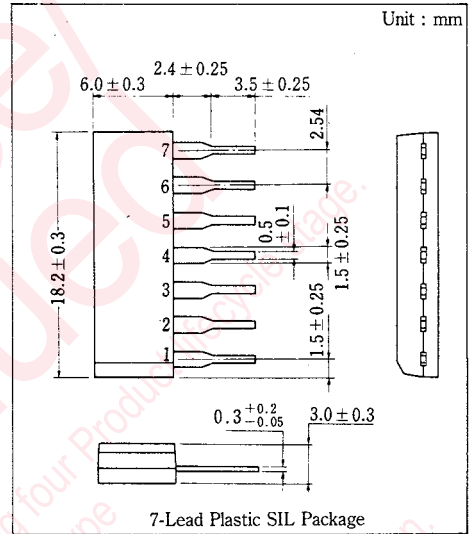
Dual-edge Signal Delay Circuit

Outline

The AN3912 is a pulse signal delay circuit using a edge-trigger type monostable multivibrator.

Features

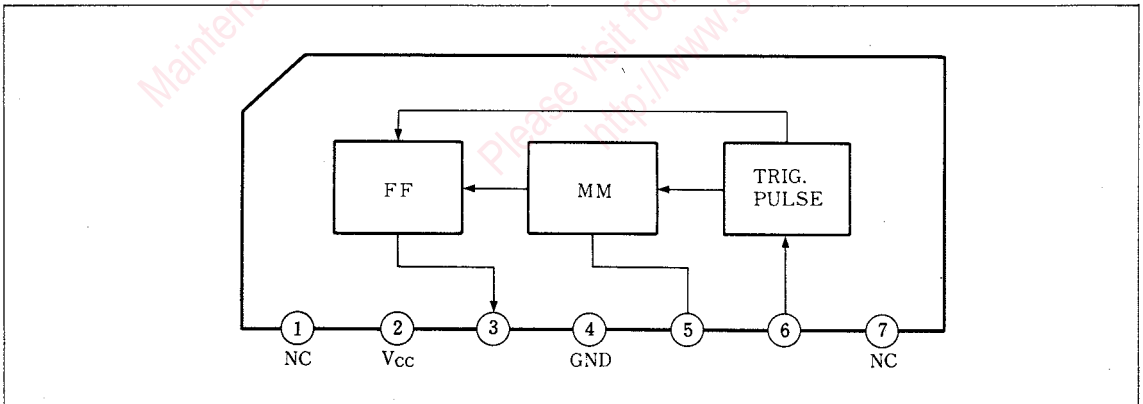
- Edge-trigger circuit number of reduces external components
- Delay time is controllable by one pair of C&R
- Low supply current
- Suitable for audio-head switch signal generator of Hi-Fi VTR.



Pin

Pin No.	Pin Name
1	NC
2	V _{CC}
3	Audio Head Switch Output
4	GND
5	Mono. Multi. Control
6	Head Switch Input
7	NC

Block Diagram



■ Absolute Maximum Ratings (Ta=25°C)

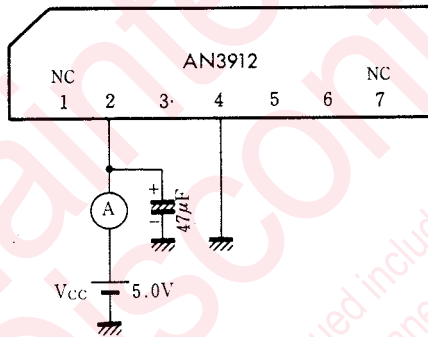
Item	Symbol	Rating	Unit
Supply Voltage	V _{CC}	6	V
Power Dissipation (Ta=70°C)	P _D	30	mW
Operating Ambient Temperature	T _{opr}	-20~+70	°C
Storage Temperature	T _{stg}	-55~+150	°C

■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Circuit Current	I ₂	1	V _{CC} =5V	1		4	mA
H/SW Input Sensitivity	V ₆	2	V _{CC} =5V	2.7			V
A.H/SW Output High Level	V ₃	2	V _{CC} =5V, I ₃ =-1mA	4			V
A.H/Output Low Level	V ₃	2	V _{CC} =5V, I ₃ =1mA			0.8	V
MM Delay Time	t ₅	2	V _{CC} =5V, R=75kΩ, C=0.082μF	5.3		6.6	ms

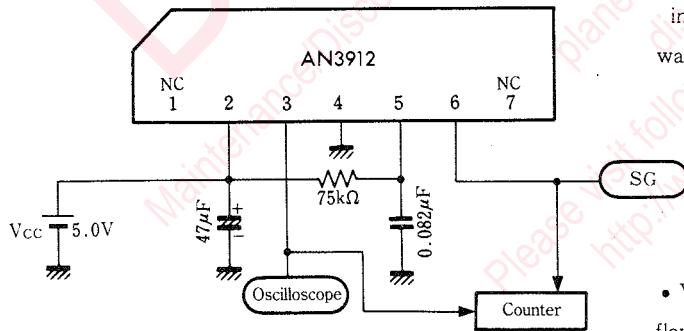
Note) Range of the Operating Supply Voltage : V_{CC(oper)}=4.5 to 5.5V

Test Circuit 1 (I₂)

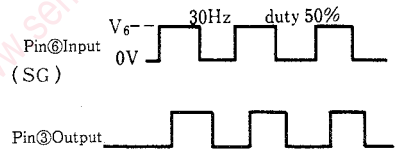


Measure the current flowing in from (Pin②).

Test Circuit 2 (V₆, V₃, t₅)

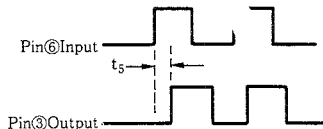


- V₆: The High Level value of the Pin⑥ input signal in the case where an input waveform appears in Pin③.

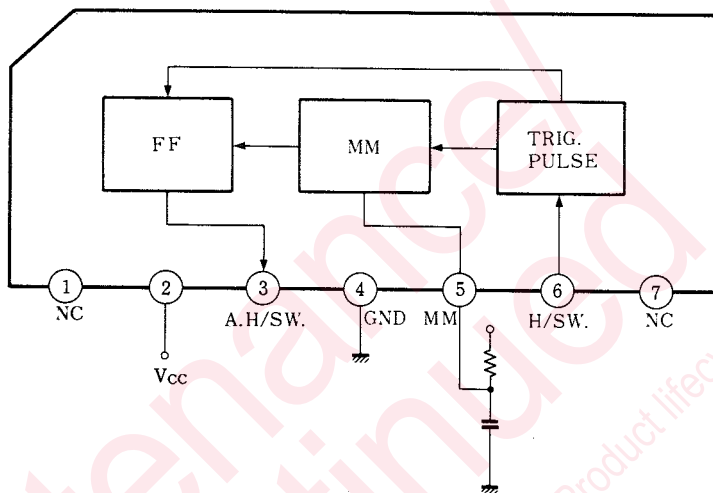


- V₃: The Pin value in the case where 1mA flows into Pin③ when the Pin③ output is Low.
- V₅: The Pin③ voltage in the case where 1mA flows out from Pin③ when the Pin③ output is High.

- t₅: The time from the Pin⑥ rise to the Pin③ rise



■ Application Circuit



Maintenance/Discontinued includes following four Product lifecycle stage.
 Discontinued
 planned maintenance type
 maintenance type
 planned discontinued type
 discontinued type
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