

- D-C Triggered by Active-High or Active-Low Inputs
- Retriggerable for Very Long Output Pulses. Up to 100% Duty Cycle
- Overriding Clear Terminates Output Pulse
- Package Options Include Both Plastic and Ceramic Chip Carriers in Addition to Plastic and Ceramic DIPs
- Dependable Texas Instruments Quality and Reliability

### description

These d-c triggered multivibrators feature output pulse duration control by three methods. The basic pulse duration is programmed by selection of external resistance and capacitance values. Once triggered, the basic pulse duration may be extended by retriggering the gated low-level-active (A) or high-level-active (B) inputs, or be reduced by use of the overriding clear. Figure 1 illustrates pulse control by retriggering and early clear.

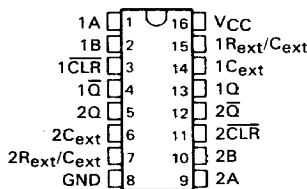
The SN54HC123 is characterized for operation over the full military temperature range of  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$ . The SN74HC123 is characterized for operation from  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ .

FUNCTION TABLE

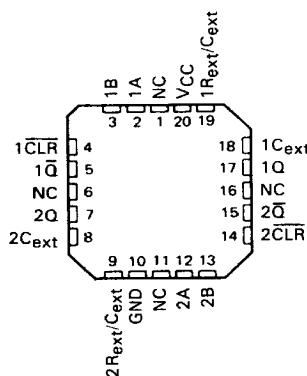
CLEAR	INPUTS		OUTPUTS	
	A	B	Q	$\bar{Q}$
L	X	X	L	H
X	H	X	$\downarrow^{\dagger}$	$H^{\dagger}$
X	X	L	$\downarrow^{\dagger}$	$H^{\dagger}$
H	L	$\uparrow$	$\square$	$\square$
H	$\downarrow$	H	$\square$	$\square$
$\uparrow$	L	H	$\square$	$\square$

<sup>†</sup> The second and third lines each indicate the logic levels the outputs will take on after the completion of any pulse already started.

SN54HC123 . . . J PACKAGE  
SN74HC123 . . . J OR N PACKAGE  
(TOP VIEW)

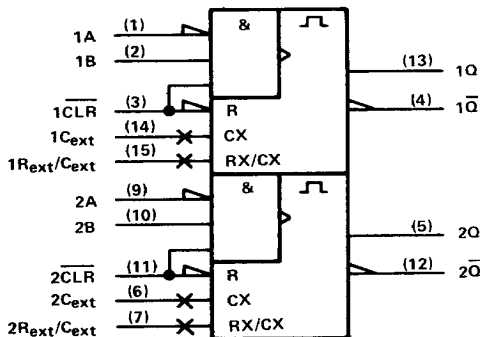


SN54HC123 . . . FH OR FK PACKAGE  
SN74HC123 . . . FH OR FN PACKAGE  
(TOP VIEW)



NC—No internal connection

### logic symbol



Pin numbers shown are for J and N packages.

**TYPES SN54HC123, SN74HC123**  
**RETRIGGERABLE MONOSTABLE MULTIVIBRATORS**

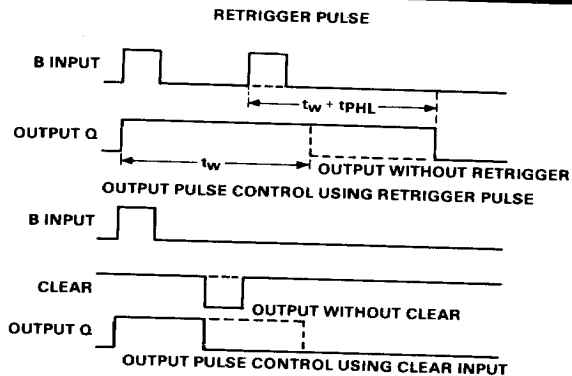


FIGURE 1 — TYPICAL INPUT/OUTPUT PULSES

maximum ratings, recommended operating conditions, and electrical characteristics

See Table IV, page 2-10.

PRODUCT PREVIEWS

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