



# MONITOR PRODUCTS COMPANY INC

## 975H • 975HHT • 985H • 985HHT Half-Size, TTL and HCMOS Compatible Clock Oscillators

### FEATURES

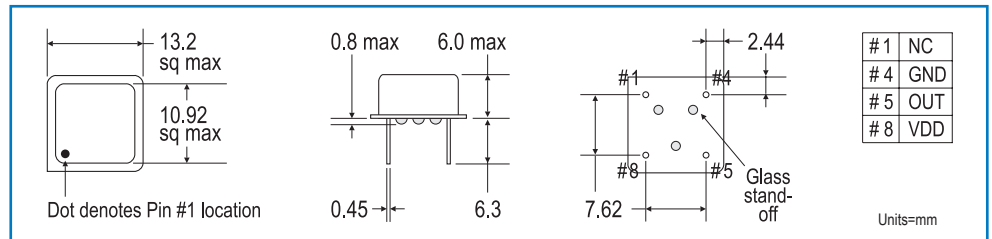
- Low power consumption
- Surface mount option
- Tristate function on 975HHT & 985HHT

Monitor Products' 975H/HHT and 985H/HHT series of half-size clock oscillators combine state-of-the-art, thick film, hybrid technology with precision manufacturing, resulting in products of unsurpassed accuracy and reliability. Their all-metal, resistance-welded cases ensure environmental protection and shielding to minimize EMI/RFI.



### APPLICATIONS

- Systems clock
- Disk drives
- Cameras
- Computer applications
- Measuring instruments
- Communications equipment



Monitor Products has a proven track record as a pioneer manufacturer in the frequency control market. If our extensive selection of standard and engineered crystals and oscillators does not meet your spec, we will work with you towards a customized solution.

ELECTRICAL SPECIFICATIONS	975H HCMOS	975HHT HCMOS/Tristate	985H HCMOS	985HHT HCMOS/Tristate
Supply Voltage	5.0 VDC ± 0.5 V		3.0 VDC ± 0.3 V	
Frequency Range	1.0~100.0 MHz		1.0~70.0 MHz	
Load Capacitance	1.0 ~ 49.9 MHz = 50pF 50.0 MHz & up = 5 TTL or 10 LSTTL or 15pF max		5 TTL or 10 LSTTL or 15pF max	
Input Current (max)	1.0 ~ 20.0 MHz: 20 mA 20.1 ~ 70.0 MHz: 40 mA 70.1 ~ 100.0 MHz: 60 mA		1.0 ~ 20.0 MHz: 10 mA 20.0 ~ 70.0 MHz: 20 mA	
Rise & Fall Time (max)	1.0 ~ 25.0 MHz: 10 nS 25.1 ~ 70.0 MHz: 6 nS 70.1 ~ 100.0 MHz: 4 nS		1.0 ~ 25.0 MHz: 10 nS 25.1 ~ 70.0 MHz: 6 nS	
Operating Temp Range	0°C ~ 70°C standard (extended temp ranges avail - call factory for other options)			
Symmetry	60%/40% @ 1/2 Vdd max std (55%/45% avail)			
Freq Stability	± 100 ppm standard (± 25 ppm available)			
Logic 0 Level	10% x Vdd min			
Logic 1 Level	90% x Vdd max			

Monitor Products Company Inc reserves the right to make changes to its products and product specifications without notice. No liability is assumed as a result of their use or application.

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09-08-00

CORPORATE OFFICE / FACTORY

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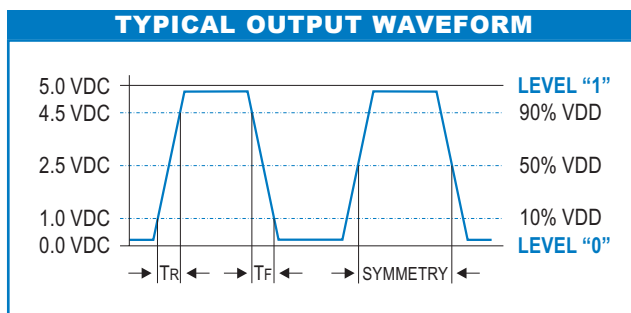
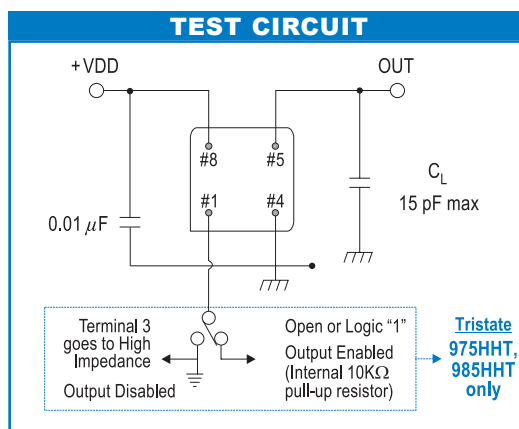
Regional Sales Office

3415 Custer Road, Suite 103, Plano, TX 75023 Tel: 972 758-8687 Fax: 972 758-7574



**ENVIRONMENTAL PERFORMANCE SPECIFICATIONS**

<b>Oper Temp Range</b>	0°C~70°C (call factory for other ranges)
<b>Storage Temp Range</b>	-55°C~125°C
<b>Vibration</b>	MIL-STD-202F, Method 204, 35G, 50 to 2000 Hz
<b>Shock</b>	MIL-STD-202F Method 213B, Test Cond E, 1000G, 1/2 Sine Wave
<b>Humidity</b>	85% RH, 85°C, 48 Hours
<b>Hermetic Seal</b>	Leak Rate $2 \times 10^{-8}$ ATM-cm <sup>3</sup> /sec max
<b>Reflow Solderability</b>	260°C, 10 secs max
<b>Solderability</b>	MIL-STD-202F, Method 208E



**PART NUMBERING KEY**

SERIES	SYMMETRY	FREQUENCY STABILITY	TEMPERATURE RANGE	PACKAGING	FREQUENCY (MHz)
975H = 5.0V 975HHT = 5.0V, Tristate 985H = 3.0V 985HHT = 3.0V, Tristate	1 = 60 / 40 % 2 = 55 / 45 %	B = 100ppm* C = 50ppm E = 25ppm	2 = 0°C~70°C* 3 = -20°C~70°C	A = Anti-static insertion tubes* G = SMD (gull-wing) J = SMD (J-lead) S = SMD (glass epoxy base) X = Customer spec	
<b>975H</b>	<b>1</b>	<b>B</b>	<b>2</b>	<b>A</b>	<b>44.000</b>
<b>975HHT</b>	<b>2</b>	<b>C</b>	<b>2</b>	<b>A</b>	<b>80.000</b>
<b>985H</b>	<b>2</b>	<b>B</b>	<b>2</b>	<b>A</b>	<b>36.000</b>
<b>985HHT</b>	<b>1</b>	<b>B</b>	<b>3</b>	<b>A</b>	<b>66.666</b>

Sample Part Numbers:

975H1B2A @ 44.000 MHz =

975HHT2C2A @ 80.000 MHz =

985H2B2A @ 36.000 MHz =

985HHT1B3A @ 66.666 MHz =

\* Standard

Call factory for additional options. Use full descriptive part number when ordering. Parts will be marked with series and frequency only.

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