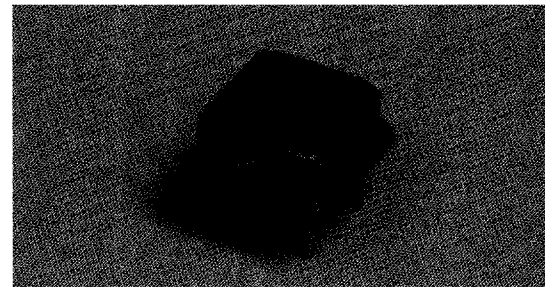




MONITOR PRODUCTS

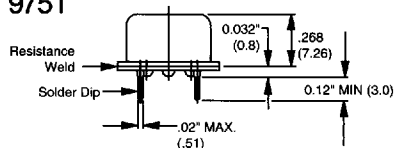
975T TTL CLOCK OSCILLATORS (1/2 Size)



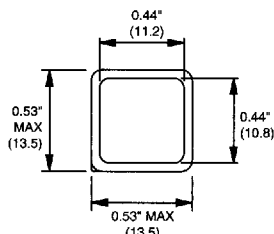
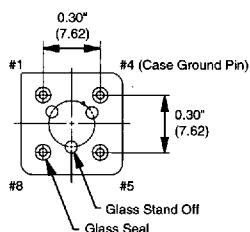
PACKAGE DIMENSIONS

Dimensions in inches and (mm)

975T



PIN CONNECTION
#1: N.C.
#4: GND
#5: OUT
#8: VDD



FEATURES

- RUGGED RESISTANCE WELD PACKAGE
- LOW PROFILE DESIGN
- TTL COMPATIBLE
- STABILITY TO $\pm .001\%$

975T SERIES OSCILLATORS are TTL compatible and are manufactured using the latest hybrid technology and feature hermetically sealed and welded packages that offer excellent resistance to environmental extremes. In addition, the metal package provides shielding to minimize RF radiation, helping to reduce EMI/RFI.

MONITOR CLOCK OSCILLATORS are also available in LSTTL, HCMOS, and ECL in the following configurations:

- INDEPENDENT DUAL OUTPUTS
- ENABLE/DISABLE
- TRI-STATE GATE
- COMPLIMENTARY OUTPUTS
- SURFACE MOUNTING

ELECTRICAL SPECIFICATIONS

• Frequency Range	1.0 MHz to 70.0 MHz	
• Frequency Stability	$\pm 100\text{ppm}$ (.01%)	
• Operating Temp. Range	0° to 70°C	
• Input Voltage	+5VDC $\pm$ 0.5VDC	
• TTL Output:		
Symmetry	60/40 @ 1.4VDC	
Rise and Fall Times	15ns max.	3.5-8.9MHz
	10ns max.	9.0-24.9MHz
	6ns max.	25.0-70.0MHz
• Logic '0' Level	+0.4V max.	3.0-31.9MHz
• Logic '0' Level	+0.5V max.	32.0-70.0MHz
• Logic '1' Level	+2.4V min.	3.5-70.0MHz
• Logic '0' Sink Current	16mA min.	3.5-19.9MHz
	1.6mA/gate	
	20mA min.	20.0-70.0MHz
	2.0mA/gate	
• Logic '1' Source Current	-0.4mA min.	3.5-19.9MHz
	-0.5mA min.	20.0-70.0MHz
• Output Load	1-10TTL Gates	
• Input Current	max. @ 25°C	
	3.50-24.9MHz	30mA
	25.0-70.0MHz	50mA

All specifications subject to change without notice.

MONITOR PRODUCTS COMPANY, INC. OVER HALF A CENTURY IN FREQUENCY CONTROL

502 Via Del Monte • Oceanside, CA 92054

Western Phone (619) 433-4510

Eastern Phone (904) 725-4384

Western FAX (619) 434-0255

Eastern FAX (904) 725-4584

ENVIRONMENTAL PERFORMANCE SPECIFICATIONS

Ambient Temperature Range

Operating 0° to 70°C Standard

Storage -55°C to 125°C

Vibration

MIL-STD-202F Method 204, 35G, 50 to 2000 Hz

Shock

MIL-STD-202F Method 213B Test Cond. E, 1000G, ½ Sine Wave

Humidity

85% RH, 85°C, 48 Hours

Hermetical Seal

Leak Rate 2×10^{-8} ATM, CC/Sec of helium

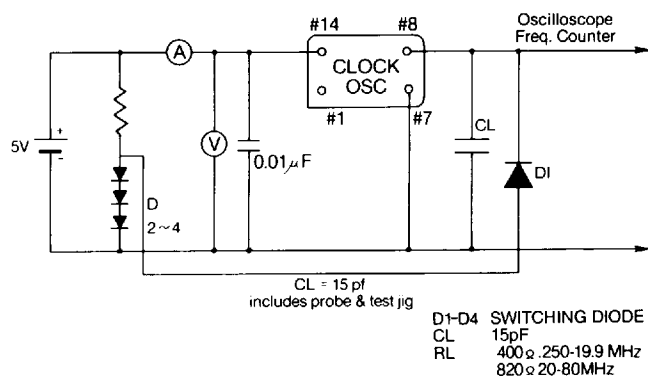
Solderability

MIL-STD-202F Method 208E

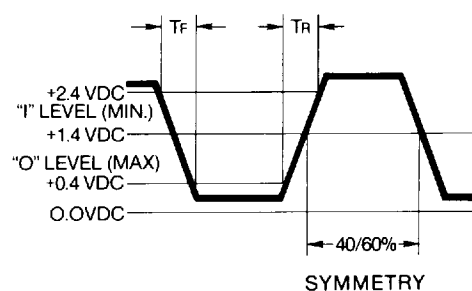
POPULAR FREQUENCIES

3.579545	8.0	20.0
3.6864	10.0	24.0
4.0	12.0	32.0
4.9152	14.31818	36.00
5.0	15.0	40.00
5.0688	16.0	48.00
6.0	16.257	60.00
6.144	18.432	64.000
7.3728	19.6608	66.666

OSCILLATOR TEST CIRCUIT



TYPICAL OUTPUT WAVEFORM



HOW TO ORDER

FAMILY: (975T--)

SYMMETRY

1 = 60/40*

FREQUENCY STABILITY

B = $\pm 0.01\%$ *
C = $\pm 0.005\%$

TEMPERATURE RANGE

1 = 25°C
2 = 0° to 70°C*

FREQUENCY (MHz)

Expressed as MHz when > 1.0 MHz
KHz < 1.0 MHz

PACKAGING

A = Standard
C = Insertion Tube
D = Anti-Static
X = Customer's Specification**

*Standard

**Suffix "X" indicates a customer specification applies to device. Factory will assign part number.
Parts will be marked with Family and Frequency only. When ordering, use the full descriptive part number.
Not all options available in all product families, check family datasheet or call factory

EXAMPLE: 975T1B3C-14.31818