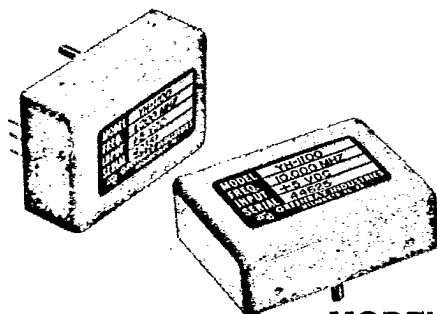


INDUSTRIES, INC.

B-45-03

## HIGH STABILITY OVEN CONTROLLED

**20 KHz to 75 MHz**  
**TTL OUTPUT**  
 $\pm 5 \times 10^{-8}/\text{DAY}$



MODEL YH-1100A

### SPECIFICATIONS:

Frequency Range: 20 KHz to 75 MHz

Frequency Stability:

 $\pm 5 \times 10^{-8}/\text{day}$  $\pm 5 \times 10^{-8}$  over temperature rangeTemperature Range:  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ 

Output: Square, to drive up to 10 TTL loads

Output Voltage:

0  $\pm$  4 volts to  $\pm$  2.4 volts minimum

Input Voltage:

 $\pm 5\text{VDC} \pm 25\text{V}$  with  $\pm 2\%$  regulation

Power: 5 watts maximum, at turn-on

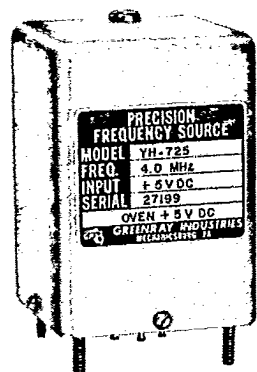
Size:  $2.5 \times 1.8 \times 1.0$ " (L-W-H) $63.5 \times 45.7 \times 25.4$  mm

Mounting: Studs

Connector: PC pins

Frequency adjustment to compensate for aging

**1 MHz to 50 MHz**  
**TTL OUTPUT**  
 $\pm 1 \times 10^{-8}/\text{DAY}$



MODEL YH-725

### SPECIFICATIONS:

Frequency Range: 1 MHz to 50 MHz

Frequency Stability:

 $\pm 1 \times 10^{-8}/\text{day}$  at fixed ambient after 30 days of aging $\pm 5 \times 10^{-8}$  over temperature rangeTemperature Range:  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ Output: Square wave, 50/50  $\pm 10\%$  to drive  $\leq 10$  TTL loadsOutput Voltage: 0  $\pm$  2V to  $\pm$  4V  $\pm$  1V

Maximum Rise and Fall Time:

15 nanoseconds: 10 to 50 MHz

25 nanoseconds: 1 to 9.99 MHz

Input Voltage:  $\pm 5\text{V DC} \pm 25\text{V}$  for oscillator and proportional ovenInput Current: Oven 850 ma. maximum;  
Oscillator 50 ma. maximumSize:  $2.0 \times 2.0 \times 3.0$ " (L-W-H) $50.8 \times 50.8 \times 76.2$  mm

Frequency Adjustment to Compensate for Aging

Proportional Oven Control

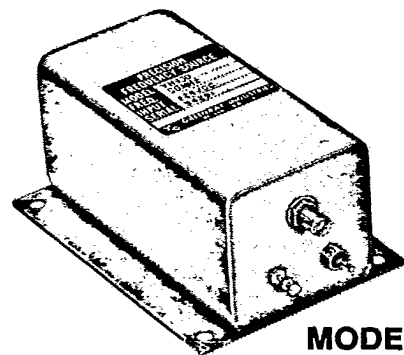
Connector: PC pins

### ORDERING INFORMATION:

Note:  $\pm 28\text{V DC}$  oven option available—Specify Model YH-725C, same price. (Oscillator operates on  $\pm 5\text{V DC}$ , oven on  $\pm 28\text{V DC}$ )

## HIGH STABILITY CRYSTAL OSCILLATORS

**1 MHz to 110 MHz**  
**SINE WAVE**  
**ULTRA-LOW PHASE NOISE**



MODEL YH-1247

### SPECIFICATIONS:

Frequency Range: 1 MHz to 110 MHz

Frequency Stability:

 $\pm 1 \times 10^{-9}/\text{day}$  at fixed ambient after 30 days of aging (At 5 MHz) $\pm 5 \times 10^{-8}$  over temperature rangeTemperature Range:  $-30^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ 

Output Power:

10 mw minimum into a 50 ohm load

Output:

Sine wave, Harmonics  $-40$  dB min.Input Voltage:  $\pm 15\text{V DC} \pm 2\%$ 

Max Input Power: Turn-On: 8W  
 Idle: 2W

Size:  $2.0 \times 4.0 \times 2.0$ " (L-W-H) $50.8 \times 101.6 \times 50.8$  mmConnector: SMA; Filtercons for  $\pm 28\text{V DC}$ 

Mounting is optional

Frequency Adjustment to Compensate for Aging

Maximum SSB Phase Noise in a 1 Hz bandwidth (At 5 MHz)

10 Hz  $-100$  dB100 Hz  $-130$  dB1 kHz  $-160$  dB

Other stabilities and aging are available upon request.