

# Frequency Doubling Unit

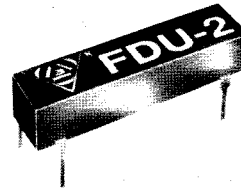
**SERIES: FDU-2**

**14 pins DIP  
TTL Interfaced**



**Features:**

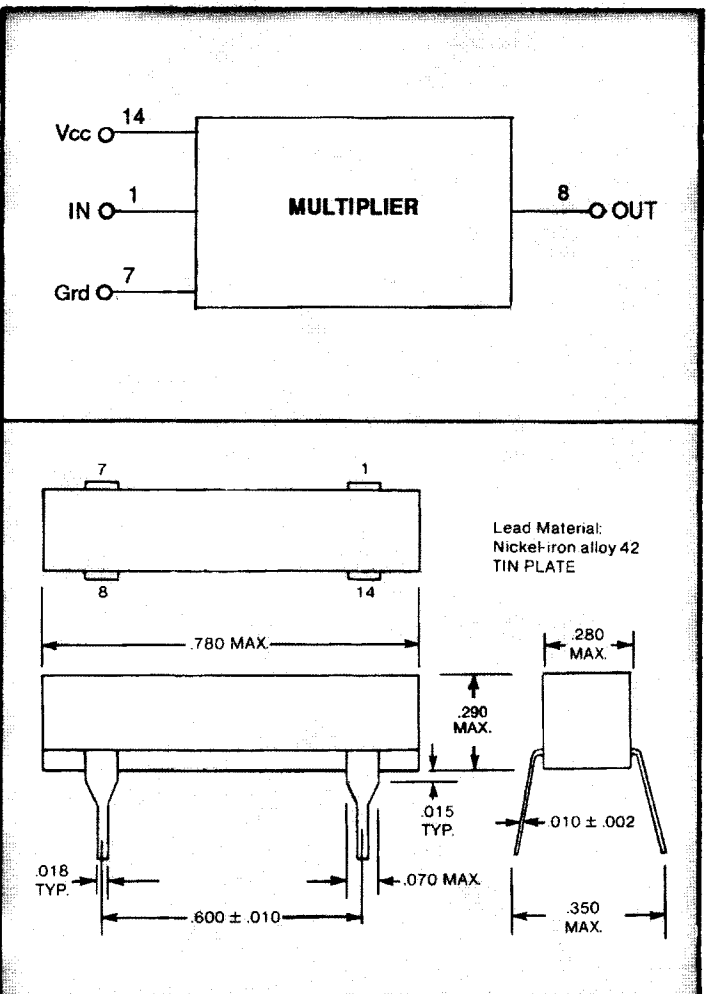
- Auto-Insertable.
- Completely interfaced with TTL and DTL application.
- No external components required.
- P.C. board space economy achieved.
- Fits standard 14 pins DIP socket.



**Specifications:**

- Frequency tolerance:  $\pm 5\%$  or 2 ns whichever is greater.
- Pulse skewing: 5 ns typical.
- Duty cycle out = 50%  $\pm 2$  ns or  $\pm 5\%$  whichever is greater.
- Rise-time: 2 ns typically.
- Temperature coefficient: 100 PPM/ $^{\circ}$ C.
- Temperature range: 0 $^{\circ}$ C to 70 $^{\circ}$ C standard (-55 $^{\circ}$ C to +125 $^{\circ}$ C) on request.\*\*
- Logic 1 Input current: 20 ua max.
- Logic 0 input current: -.6 ma max.
- Logic 1 V out: 2.5 min.
- Logic 0 V out: 0.5 V max.
- Logic 1 fan-out: 25 max.
- Logic 0 fan-out: 12.5 max.
- Supply voltage: 4.75 to 5.25 Vdc.
- Supply current:  $I_{ccL}$ : 50 ma.  
 $I_{ccH}$ : 15 ma.

\*\*Add an "M" after the part number  
Ex: P/N FDU-2-2R000M Case: E5



Part Number	Input Frequency In (MHZ)	Output Frequency In (MHZ)
FDU-2-1R000	.500	1.000
FDU-2-2R000	1.000	2.000
FDU-2-4R000	2.000	4.000
FDU-2-4R096	2.048	4.096
FDU-2-6R000	3.000	6.000
FDU-2-8R000	4.000	8.000
FDU-2-12R000	6.000	12.000
FDU-2-16R000	8.000	16.000
FDU-2-32R000	16.000	32.000

Other frequencies available on request.