# **Manchester Repeater**

SERIES: MAR-90

(24 pins DIP) Fast-TTL Interfaced



## **Description:**

In today's data communication networks, it is imperative that the data be transmitted and received with a high degree of pulse and frequency fidelity. Data sent through transmission lines get degraded as it travels down the medium. For very long transmission lines, the data received may differ from the transmitted data both in frequency and duty cycle. If this shift is appreciable, data received will be incomprehensible and therefore useless.

Our MANCHESTER REPEATER MAR-90 is ideally suitable to restore the duty cycle of the original signal. It can be placed anywhere along the transmission line at regular intervals as necessary. It is very simple to implement and causes no distortion to the data format. Each unit is designed with a particular baud rate. Units with other baud rates, not listed in the P/N table, are available on request.



#### Features:

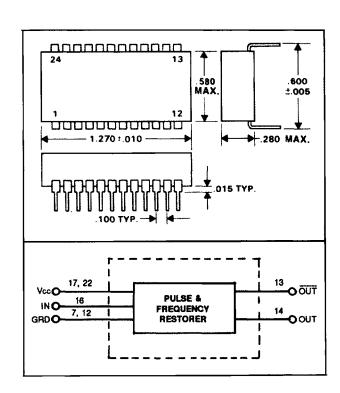
- Input/Outputs TTL buffered.
- Jitter Free Operation.
- Self-synchronizing

## **Applications:**

- Local Area Network (LAN) Interfaces
- **■** Ethernet BUS Interfaces
- IEEE 802 LAN Interfaces
- Fiber Optic Data Links

### Specifications:

- Input signal requirement: TTL logic
- Output fan-out: STD-TTL Schottky loads.
- Operating temperature: 0'C 70'C. (-55'C to +125'C on request).
- Temperature coefficient: 100 PPM/'C.
- Supply voltage, Vcc: 5Vdc ±5%.
- Power dissipation: 350 mw typical.
- Input frequency range: ±5%.
- Input pulse-width range: ±20%.
- Inherent delay = 1/ (4 × baud rate).
- Output lock-on time = Inherent delay.
- DC Parameters: See TTL-Fast Schottky Logic Table on Page 6.



Part Number	Operating Data Rate
MAR-90-1.3	1.3 MB/S
MAR-90-4	4 MB/S
MAR-90-6	6 MB/S
MAR-90-16	16 MB/S