

# Models T16L08 and T16LR8



Vishay Techno

## Dual-In-Line, 8 Bit R/2R Ladder Networks



### APPLICATIONS

8 Bit, R/2R Ladder networks for D/A and A/D converter with bi-polar or CMOS switches.

### ELECTRICAL SPECIFICATIONS

**Ladder Network Accuracy:**  $\pm 1/2$  LSB from 0°C to + 70°C.

**Ladder Network Resistance Tolerance:**  $\pm 2\%$ .

**Temperature Coefficient of Resistance:**  $\pm 100$ PPM/°C.

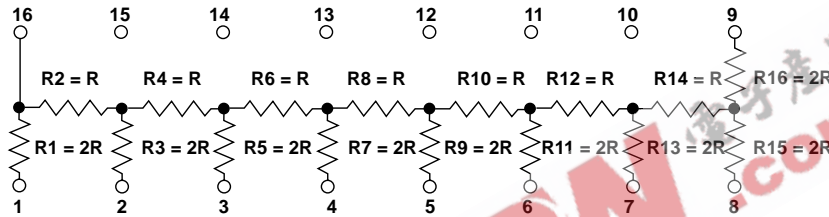
**Operating Temperature Range:** 0°C to + 70°C.

**Power Dissipation Rating at + 70°C Ambient:** 50mW for individual resistor and 1.8 watts total package rating.

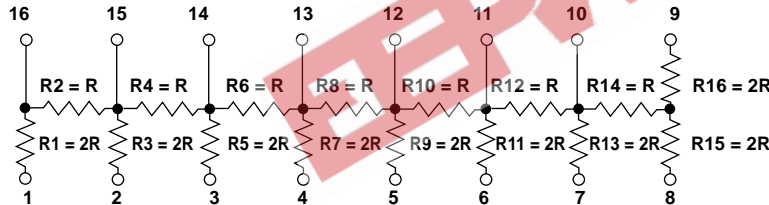
**Standard Resistance Values (R):** 25 kilohms, 50 kilohms, 100 kilohms.

### SCHEMATICS

#### T16L08



#### T16LR8



### RATIO MATCH TOLERANCE

$$R1/R2 = 2 \pm 1\%$$

$$R1/R3 = 1 \pm 1\%$$

$$R1/R4 = 2 \pm 1\%$$

$$R1/R5 = 1 \pm 1\%$$

$$R1/R6 = 2 \pm 1\%$$

$$R1/R7 = 1 \pm 1\%$$

$$R1/R8 = 2 \pm 1\%$$

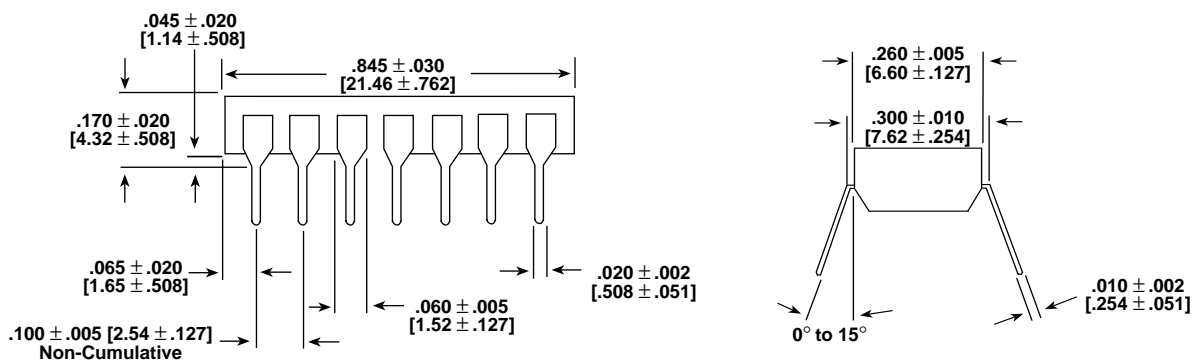
$$R9/R10 = 2 \pm 0.5\%$$

$$R11/R12 = 2 \pm 0.4\%$$

$$R15/R13 = 1 \pm 0.2\%$$

$$R15/R14 = 2 \pm 0.2\%$$

### DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



### HOW TO ORDER

**T16L08 or T16LR8**  
MODEL

**104**  
RESISTANCE VALUE (Ohms)

**EXAMPLE:**  
104 = R = 100 kilohms.  
**REFERENCE:**  
2R = 200 kilohms.

First two digits are significant, third digit signifies number of zeros to follow.