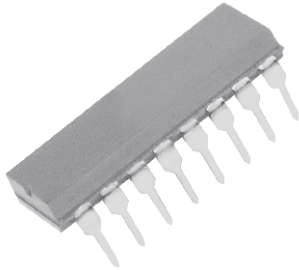


## Dual-In-Line, 8 Bit R/2R Ladder Networks



### 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:**  $\pm 2\%$ .

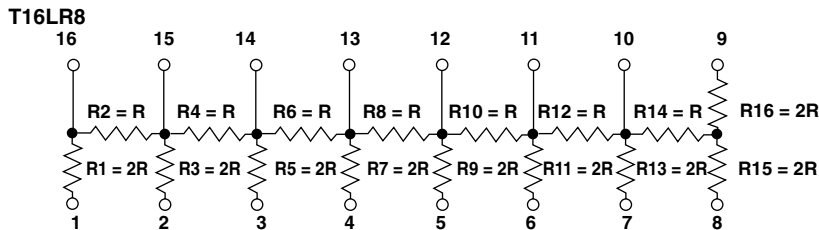
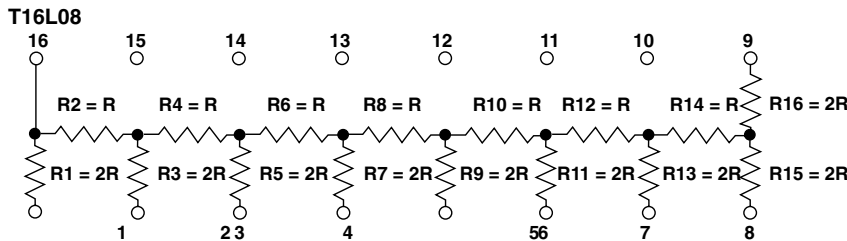
**Temperature Coefficient of Resistance:**  $\pm 100$  PPM/°C.

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

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

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

### SCHEMATICS



### RATIO MATCH TOLERANCE

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

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

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

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

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

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

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

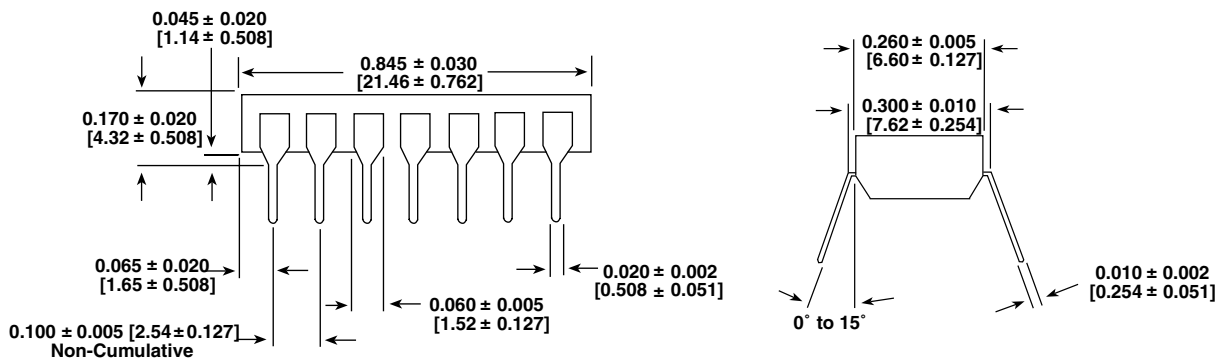
$$R9/R10 = 2 \pm 0.5\%$$

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

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

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

### DIMENSIONAL CONFIGURATIONS in inches [millimeters]



### HOW TO ORDER

T16L08 or T16LR8

MODEL

104

RESISTANCE VALUE (Ohms)

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

**EXAMPLE:**

104 = R = 100 kilohms.

**REFERENCE:**

2R = 200 kilohms.

e3

LEAD TERMINATION

e3 = SnAg  
95/5



## Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.