## Vishay Foil Resistors



# Bulk Metal<sup>®</sup> Foil Technology 20 Pin Dual-In-Line Hermetic Resistor Network



Product may not be to scale

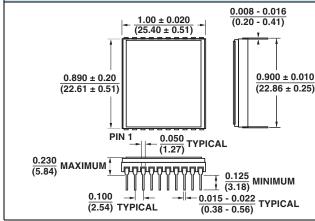
The 20 pin 1 inch x 1 inch side brazed ceramic package is a good choice for a variety of applications. The footprint of this package is frequently used in metal enclosures and open face circuitry as well as the side brazed ceramic package offered by Vishay. Select Model 1476 for lower profile and additional pins. This network can contain up to 221 V5X5 resistor chips.

Review data sheet "7 Technical Reasons to Specify Bulk® Metal Foil Resistor Networks."

#### **ORDERING INFORMATION - 1460 PARTS**

Networks are built to your requirements. Send your schematic and electrical requirements to the Applications Engineering Department. (See data sheet "Network Worksheet.") A unique part number will be assigned which defines all aspects of your network.

## FIGURE 1 - STANDARD DIMENSIONS in inches (millimeters)



VISHAY MODEL NUMBER	CHIP CAPACITY	MAXIMUM POWER RATING (WATTS) AT + 70 °C
1460	V15X5 - 73 chips	2.40 Watts
	V5X5 - 221 chips	

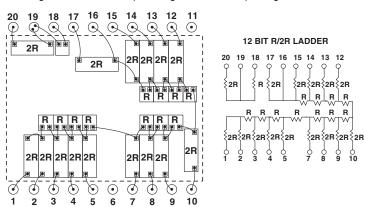
#### NOTES:

- 1. These networks utilize Vishay Bulk Metal<sup>®</sup> Foil resistor chips V5X5 and V15X5 or VTF15X5 Thin Film chips.
- The V5X5 and V15X5 chips have maximum resistance values of 10K and 33K respectively in Bulk Metal<sup>®</sup> Foil and 500K in VTF15X5 Thin Film chips.
- 3. The V5X5 and V15X5 chip(s) can be intermixed in a package.

#### FIGURE 2 - SAMPLE CIRCUIT DESIGNS AND CHIP LAYOUTS

#### NOTE

Usable area is represented by the dotted lines - a rectangle 0.650 Inches x 0.850 Inches. Illustrations not to scale. Chips shown undersize for clarity. Drawing view is from the top looking down into the package.



The 12 Bit R/2R Ladder features the inherent stability of Vishay metal foil resistor networks. It provides  $\pm$  1/2 LSB accuracy over the MIL temperature range of - 55 °C to + 125 °C. This Vishay network is Pin-for-Pin compatible with the TRW Model 5420 Series and Beckman Model 811 Series. However, it features low TCR, high speed, low noise, and the inherently stable performance of Vishay Bulk Metal  $^{\circ}$  Foil resistive components, in addition to improved environmental characteristics, due to the hermetic sealing.



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