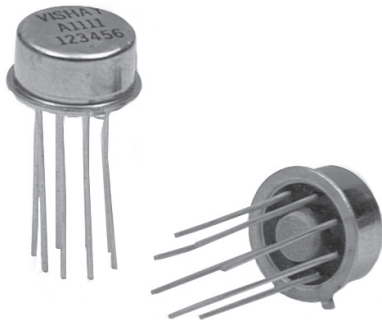


Bulk Metal® Foil Technology 8 Pin Transistor Outline Hermetic Resistor Network



Product may not be to scale

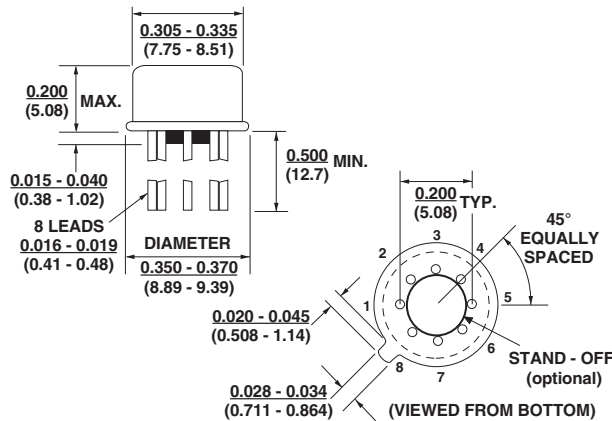
The eight pin TO-5 package with a 0.200" pin circle, is the most popular package for uncomplicated networks. This network can contain up to 9, V5X5 resistor chips.

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

ORDERING INFORMATION - 1413 PARTS

Networks are built to your requirements. Send your schematic and electrical requirements to the Applications Engineering Department. (See datasheet "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
1413	V15X5 - 3 chips	0.4 Watt
	V5X5 - 9 chips	

NOTES:

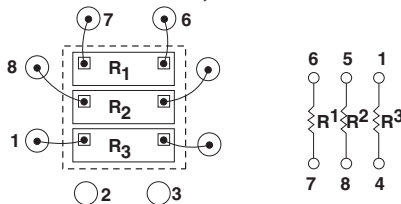
1. These networks utilize Vishay Bulk Metal® Foil resistor chips V5X5 and V15X5 or VTF15X5 Thin Film chips.
2. The V5X5 and V15X5 chips have maximum resistance values of 10K and 33K respectively in Bulk Metal® Foil and 500K in VTF15X5 Thin Film chips.
3. The V5X5 and V15X5 chip(s) can be intermixed in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

FIGURE 2 - SAMPLE CIRCUIT DESIGNS AND CHIP LAYOUTS

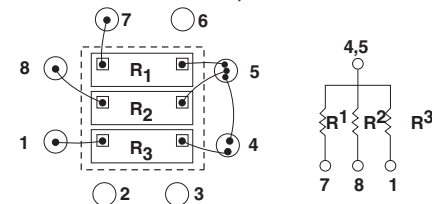
NOTE:

Usable area is represented by the dotted lines - a square 0.150" x 0.150". Illustrations not to scale. Chips shown undersize for clarity. Drawing view is from the top looking down into the package.

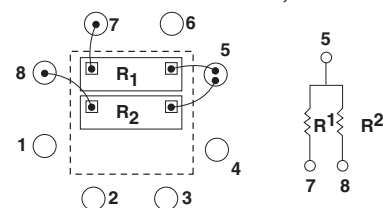
THREE RESISTORS, CASE ISOLATED



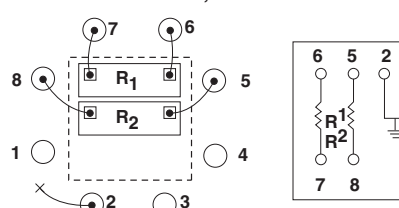
THREE RESISTOR ARRAY, CASE ISOLATED



TWO RESISTOR VOLTAGE DIVIDER, CASE ISOLATED



TWO RESISTORS, CASE GROUNDED



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay Precision Group"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay Precision Group disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay Precision Group's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay Precision Group.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay Precision Group products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay Precision Group for any damages arising or resulting from such use or sale. Please contact authorized Vishay Precision Group personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.