



# TO-HERMETIC NETWORK SERIES

## Transistor Outline Hermetic Resistor Networks

### FEATURES

- **Temperature Coefficient of Resistance**  
(-55 °C to 125 °C, 25 °C as reference.):  $\pm 2.0$  ppm/°C
- **TCR Tracking**  
(-55 °C to 125 °C, 25 °C as reference.):  
Without selection: All within 5 ppm/°C  
With selection: All within 0.5ppm/°C

- **Resistance Range** (per element): 5Ω to 80 KΩ
- **Tolerance:** Absolute: to 0.005%  
Match: to 0.0005%
- **Load Life Stability:**  $\pm 0.015\%$  Max.  $\Delta R$  under full rated power, @ 70 °C for 2000 hours.
- **Shelf Life Stability:** 5 ppm/year. Max.  $\Delta R$  hermetically sealed.
- **Rise Time:** 1ns, effectively no ringing.

For complete datasheet on resistive elements please go to: <http://www.texascomponents.com/pdf/vrhc.pdf>

	Model	Number Of Pins	Chip Capacity		Power Rating @70°C	Package Type	Dimensions In Inches
			V5x5	V15x5			
	1401	3	2	--	0.15W	TO-18 3 Pin Hermetic	DIA.: 0.209-0.230 H: 0.200 Max. LL: 0.500 Min.
			1	1			
			--	1			
	1403	4	2	1	0.15W	TO-18 4 Pin Hermetic	DIA.: 0.209-0.230 H: 0.200 Max. LL: 0.500 Min.
			5	--			
	1413	8	9	3	0.4W	TO-5 8 Pin Hermetic	DIA.: 0.350-0.370 H: 0.200 Max. LL: 0.500 Min.
	1417	8	12	3	0.4W	TO-5 8 Pin Hermetic	DIA.: 0.350-0.370 H: 0.200 Max. LL: 0.500 Min.
1419	10	12	3	0.4W	TO-5 10 Pin Hermetic	DIA.: 0.350-0.370 H: 0.200 Max. LL: 0.500 Min.	
1421	12	49	16	0.6W	TO-8 12 Pin Hermetic	DIA.: 0.590-0.610 H: 0.150 Max. LL: 0.500 Min.	
1422	16	49	16	0.6W	TO-5 16 Pin Hermetic	DIA.: 0.590-0.610 H: 0.200 Max. LL: 0.500 Min.	

### Construction

**Metal cover:** grade A Nickel  
**Header:** Gold Plated Kovar  
**Leads:** Kovar with 50 μ" gold plating, Mil-Std-1276, Type K22-A3

### Hermeticity

**Gross Leak:** Mil-Std-202 Method 112, test Condition D