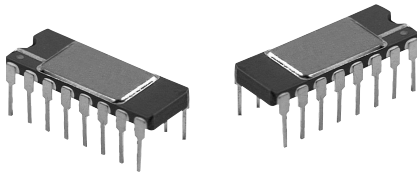




# Hermetic, Dual-In-Line Resistor Networks (Custom)



Designed To Meet Or Exceed MIL-PRF-83401 Characteristic "C"

The most advanced thin film technology is put to work in the manufacture of exceptionally stable, precision thin film resistor networks in a variety of popular hermetic-type packages. These networks are based on the utilization of a resistive film possessing outstanding stability throughout board assembly and equipment life.

Manufacturing is performed under rigid process control by a team of specialists having many years experience in the design, fabrication and automatic laser adjustment of several hundred different precision thin film resistor networks. Circuits are designed for specific customer requirements and manufactured according to highly standardized procedures. Testing is conducted in one of the most completely equipped laboratories in the industry.

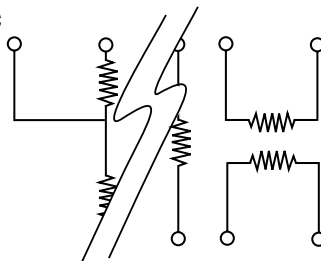
## FEATURES

- True hermetic construction
- Standard 8,14,16,18, 20 pin packages
- Chip and wire construction
- Exceptional stability over time and temperature

## TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	10	2
	ABS	RATIO
TOL	0.02	0.01

## SCHEMATIC



Custom schematics available. Please consult factory.

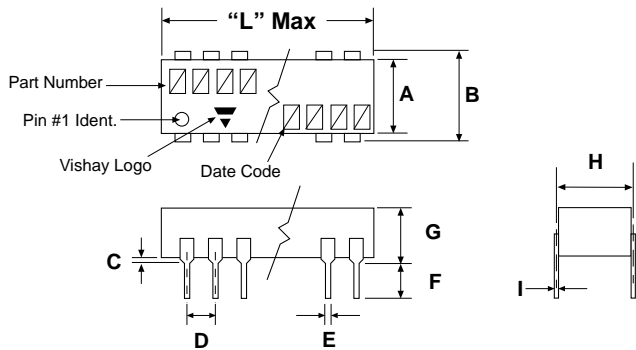
THROUGH HOLE

STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
MATERIAL	TAMELOX®	TANTALUM NITRIDE*
Resistance Range	50 ohms to 1.5 meg total	50 ohms to 300K total
TCR:	Tracking	± 2ppm/°C (typical less 1ppm/°C equal values)
	Absolute	±10ppm/°C to ± 25ppm/°C
Tolerance:	Ratio	± 0.01% to ± 0.5%
	Absolute	± 0.02% to ± 1.0%
Power Rating:	Resistor	100mW per element typical
Stability:	ΔR Absolute	500ppm
	ΔR Ratio	150ppm
Voltage Coefficient		< 0.1ppm/V
Working Voltage		100V
Operating Temperature Range		- 55°C to + 125°C
Storage Temperature Range		- 55°C to + 150°C
Noise		< - 30dB
Thermal EMF		< 0.10μV/°C
Shelf Life Stability:	Absolute	100ppm
	Ratio	20ppm
		1 year @ + 25°C
		1 year @ + 25°C

\*Tantalum Nitride film is custom, available upon request.

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**DIMENSIONS AND IMPRINTING** in inches and millimeters



DIMENSION	INCHES	MILLIMETERS
A	0.295	7.49
B	0.310 ±0.010	7.88 ±0.25
C	0.035 ±0.010	0.89 ±0.25
D	0.100 Non-accum.	2.54
E	0.018 ±0.002	0.46 ±0.05
F	0.130 Typical	3.30
G	0.130 Max.	3.30
H	0.300 Typical	7.62
I	0.010 Typical	0.25

NUMBER OF PINS	8	14	16	18	20
"L" Dimensions	0.528	0.710	0.810	0.910	1.010
(mm)	(13.41)	(18.03)	(20.57)	(23.11)	(25.65)

THROUGH HOLE

MECHANICAL SPECIFICATIONS	
Resistive Element	Tamelox <sup>®</sup> or Tantalum Nitride
Substrate Material	Alumina
Body	Ceramic
Terminals	Copper Alloy

**How to Order Check List**

Special requirements should be identified in advance, but as a minimum, you should have the following information ready.

Electrical	Mechanical
<ol style="list-style-type: none"> <li>Resistors, by value and tolerance.</li> <li>Reference resistor(s) and matching of which resistors to which reference resistors.</li> <li>Resistance by ratio.</li> <li>Absolute temperature coefficient of resistivity.</li> <li>Temperature tracking of subordinate resistors to reference resistor(s).</li> <li>Maximum operating voltage.</li> <li>Resistor power ratings.</li> <li>Operating temperature range.</li> </ol>	<ol style="list-style-type: none"> <li>Maximum allowable seated height (from PC board to top of network).</li> <li>Special marking concerns.</li> <li>Schematic pin out of package.</li> </ol>