

## Solid Ceramic Machine Insertable SIP Networks

CTS' solid ceramic construction withstands thermal shock during soldering and extended thermal cycling. This is possible because CTS' networks are constructed of a solid piece of ceramic, with a single thermal coefficient of expansion.

- · Compact edge mount modules
- · Ultra high stability and reliability
- .100" lead spacing
- · Alumina substrate
- · Application specific circuits available

#### Resistance Range:

Standard: 22 $\Omega$  to 1 Meg $\Omega$  Special: below 22 $\Omega$  and above 1 Meg $\Omega$ 

#### Resistance Tolerance:

Standard:  $\pm 2\%$  or  $0.5\Omega$ Special:  $\pm 0.25\%$ , or  $0.25\Omega$ (whichever is greater)

#### Maximum Operating Voltage:

100V not to exceed rated power

#### Temperature Coefficient:

Standard:  $100\Omega$  to 1 Meg $\Omega$   $\pm 100$ PPM/°C typical  $10\Omega$  to  $99\Omega$   $\pm 200$ PPM/°C typical Tracking: Available to 50PPM/°C with same formulation and on same side of substrate.

## Operating Temperature Range: -55°C to +125°C

33 0 10 1123 0

#### Dielectric Strength:

200 VAC

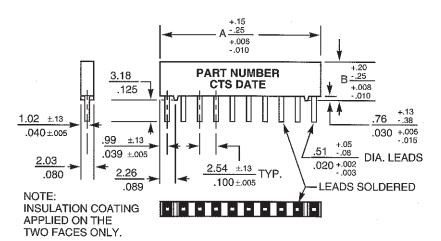
#### Resistance Matching (2 like resistors)

Standard:  $50\Omega$  to  $100\Omega$ : 0.5% or  $0.5\Omega$  (whichever is greater)  $100K\Omega$  to 1 Meg $\Omega$ :  $\pm 2\%$ 

#### **Ratio Matching**

Special:  $50\Omega$  to  $100\Omega$ :  $\pm 1\%$   $100\Omega$  to  $100K\Omega$ :  $\pm 0.5\%$   $100K\Omega$  to  $1~Meg\Omega$ :  $\pm 2\%$ 

# SINGLE-IN-LINE



B DIM—STANDARD .250 HIGH				
		PACKAGE POWER		
#Pins	A Dim	@25°C	@70°C	
4	9.60/.378	1.0	0.7	
5	12.14/.478	1.2	0.8	
6	14.68/.578	1.5	1.0	
8	19.76/.778	2.1	1.4	
9	22.30/.878	2.3	1.5	
10	24.84/.978	2.5	1.7	
	Schematic			
Res. Power	1, 5, 7	.38	.25	
Res. Power	.3	.6	.4	

#### NOTES:

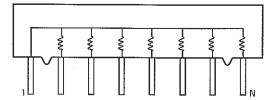
- 1. General Tolerances mm ±0.25 inch ±.010
- 2. Dimensions are mm/in.

B DIM— .350 HIGH				
		PACKAGE POWER		
#Pins	A Dim	@25°C	@70°C	
4	9.60/.378	1.3	0.9	
6	14.68/.578	2.1	1.4	
8	19.76/.778	2.7	1.8	
10	24.84/.978	3.3	2.2	
11	27.38/1.078	3.5	2.3	
12	29.45/1.178	3.7	2.5	
	Schematic			
Res. Power	2, 6, 8	.45	.3	
Res. Power	.4	.6	.5	

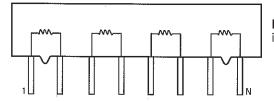
Application notes are found on pages 20 - 21. Power Derating, Packaging and Environmental Performance Specifications are found on pages 31- 35.



Bussed CTS Schematic #1 - .250 High Schematic #2 - .350 High

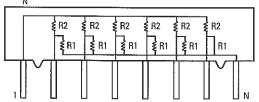


Isolated CTS Schematic #3 - .250 High Schematic #4 - .350 High

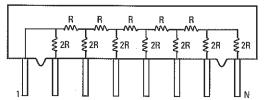


Not Available in 5, 7, 9, 11 Pins

Dual Terminator CTS Schematic #5 - .250 High Schematic #6 - .350 High



R/2R Ladder CTS Schematic #7 - .250 High Schematic #8 - .350 High

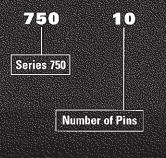


(Ohms)	(Ohms)
10	3900
12	4700
15	5600
18	6800
22	8200
27	10000
33	11000
39	12000
47	15000
56	18000
68	22000
82	27000
100	33000
120	39000
150	47000
180	56000
220	68000-
270	82000
330	100000
390	110000
470	120000
560	150000
680	180000
820	220000
1000 1100	270000
	330000
1200 1500	390000 470000
1900	560000
2200	YESTER PROTECTION OF A PROTECT
2200 2700	680000 820000
2700 3300	1000000
ออบบ	1000000

### **How to Order** Series 750 Networks

Custom networks are marked with either a customer part number or a non-descriptive CTS part number. Send documentation to CTS Sales Office giving schematic, resistor values and tolerance, and other non-standard information. See page 20 for custom network information.

See page 31 for part marking information.



Prefix Resistance Value

Schematic 1 Bussed (.250 High)

- 3 Isolated (.250 High)
- **Dual Terminator (.250 High)**
- Ladder (.250 High)
- Bussed (.350 High)
- Isolated (.350 High) 6
- Dual Terminator (.350 High)

Ladder (.350 High)

CTS RESISTOR NETWORKS • 406 PARR ROAD • BERNE, IN 46711 • FAX: (219)589-3243 • http://www.ctscorp.com

