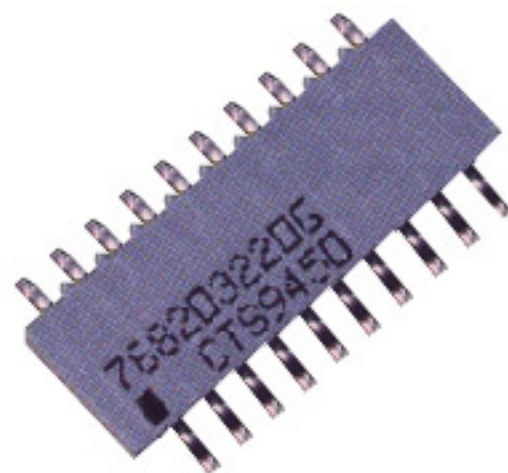


## Surface Mount Series 768 (Medium Body)

### Medium Body, Small Outline Networks

- Low profile - board network clearance of .005"/0.10"
- Conforms to EIA PDP-100 SOGN-0002
- 24mm tape & reel or slide packs
- Application specific available
- No internal dendrite growth
- Compatible with all solder processes - Wave, IR reflow, Vapor phase reflow
- Recommended for bottom side attachment



### Resistance Range:

Standards: 10 Ohm to 1 Meg Ohm

### Resistance Tolerance:

Standard:  $\pm 2\%$  or 0.5 Ohm (whichever is greater)

Special:  $\pm 0.25\%$  or 0.3 Ohm (whichever is greater)

### Maximum Operating Voltage:

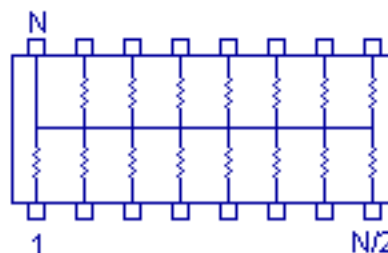
50V not to exceed rated power

### Temperature Coefficient:

Standard:

100 Ohm to 1 Meg Ohm  $\pm 100$  PPM/Degree Celsius

### Bussed CTS Schematic 1



### Isolated CTS Schematic 3

typical  
10 Ohm to 99 Ohm +-200 PPM/Degree Celsius typical

Operating Temperature Range:

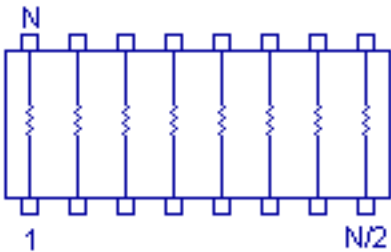
-55C to +125C

Dielectric Strength:

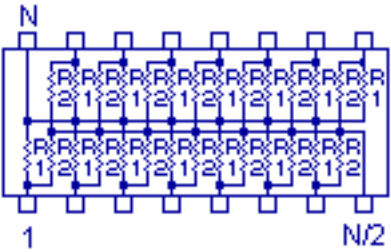
100VAC

| Power Rating: (Total Network Power) |         |         |         |
|-------------------------------------|---------|---------|---------|
|                                     | 14 Pins | 16 Pins | 20 Pins |
| @25 Deg. Cel.                       | 2.0w    | 2.3w    | 3.0w    |
| @70 Deg. Cel.                       | 1.3w    | 1.5w    | 2.0w    |

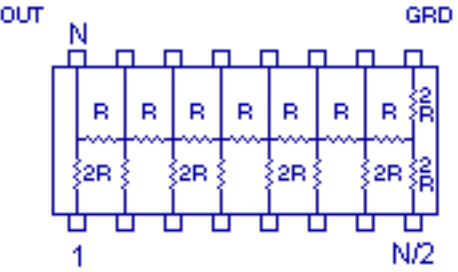
| Maximum Resistor Power:<br>(Not To Exceed Total Network Power) |      |     |      |      |
|----------------------------------------------------------------|------|-----|------|------|
| Schematic                                                      | 1    | 3   | 5    | 7    |
| @25 Deg. Cel.                                                  | .15w | .3w | .15w | .15w |
| @70 Deg. Cel.                                                  | .1w  | .2w | .1w  | .1w  |



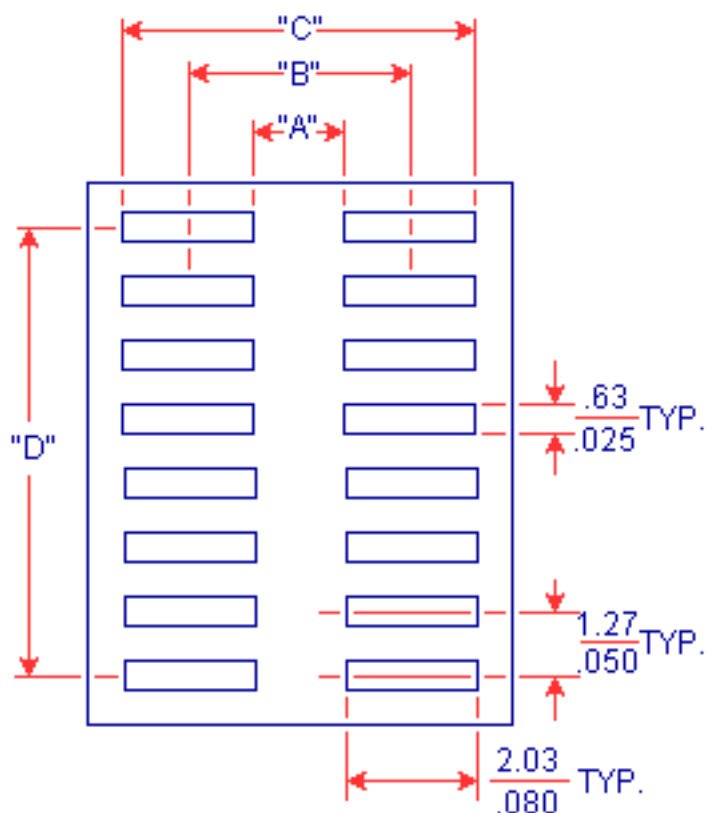
Dual Terminator CTS Schematic 5



R/2R Ladder CTS Schematic 7





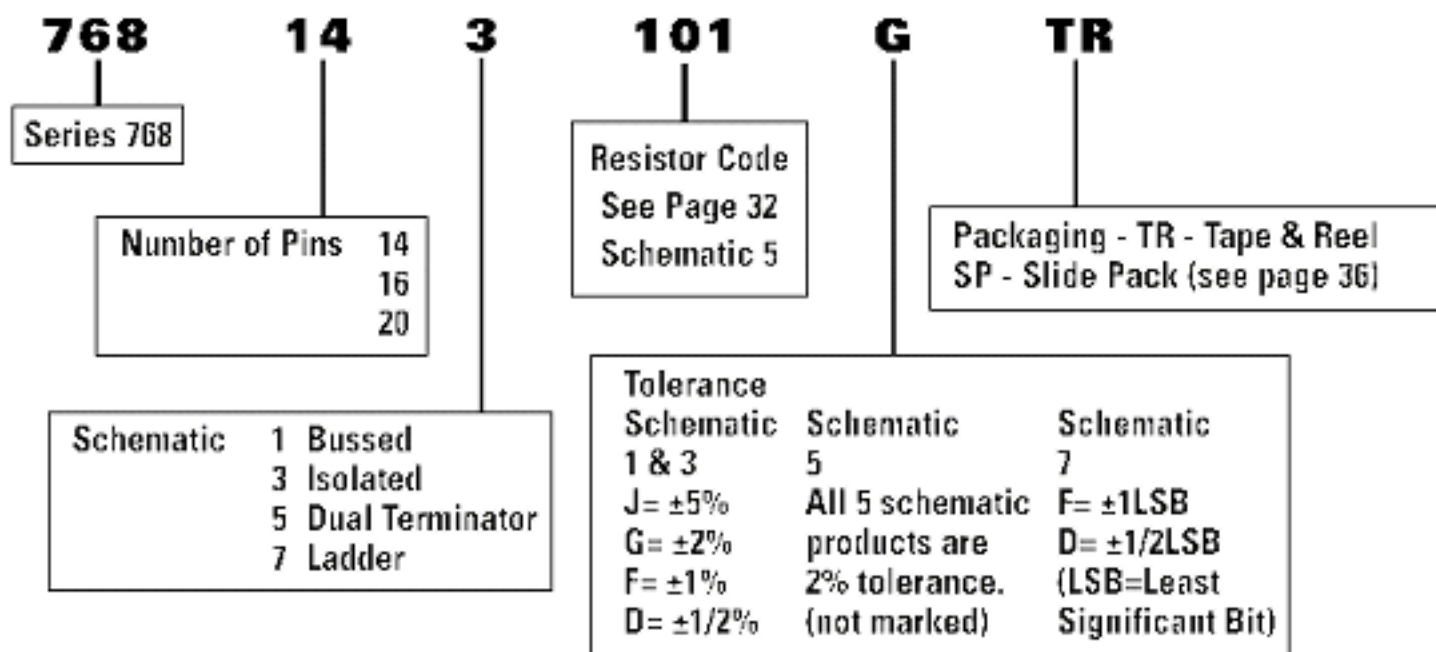


Recommended Land Pattern

| LEAD COUNT |     | A    | B    | C    | D     |
|------------|-----|------|------|------|-------|
| 14         | mm  | 5.34 | 7.37 | 9.40 | 7.60  |
|            | in. | .210 | .290 | .370 | .300  |
| 16         | mm  | 5.34 | 7.37 | 9.40 | 8.90  |
|            | in. | .210 | .290 | .370 | .350  |
| 20         | mm  | 5.34 | 7.37 | 9.40 | 11.43 |
|            | in. | .210 | .290 | .370 | .450  |

### How to Order Series 768 Products

Application specific custom networks are marked with either a customer part number or a non-descriptive CTS part number. Send documentation to a CTS Sales Office giving schematic, resistor values and tolerance, and other non-standard information.



NOTE: No dashes or spaces to appear in part number.

Example: 768143101GTR

| (Ohms) | (EIA Code) | (Ohms) | (EIA Code) |
|--------|------------|--------|------------|
| 0*     | 000X       | 3300   | 332        |
| 10     | 100        | 3900   | 392        |
| 12     | 120        | 5100   | 512        |
| 15     | 150        | 5600   | 562        |
| 18     | 180        | 6800   | 682        |
| 22     | 220        | 8200   | 822        |
| 27     | 270        | 10000  | 103        |
| 33     | 330        | 11000  | 113        |
| 39     | 390        | 12000  | 123        |
| 47     | 470        | 15000  | 153        |
| 51     | 510        | 18000  | 183        |
| 56     | 560        | 20000  | 203        |
| 68     | 680        | 22000  | 223        |
| 82     | 820        | 27000  | 273        |
| 100    | 101        | 33000  | 333        |
| 110    | 111        | 39000  | 393        |
| 120    | 121        | 47000  | 473        |
| 150    | 151        | 56000  | 563        |
| 180    | 181        | 68000  | 683        |
| 200    | 201        | 82000  | 823        |
| 220    | 221        | 100000 | 104        |

|      |     |         |     |
|------|-----|---------|-----|
| 270  | 271 | 110000  | 114 |
| 330  | 331 | 120000  | 124 |
| 390  | 391 | 150000  | 154 |
| 470  | 471 | 180000  | 184 |
| 510  | 511 | 200000  | 204 |
| 560  | 561 | 220000  | 224 |
| 680  | 681 | 270000  | 274 |
| 820  | 821 | 330000  | 334 |
| 1000 | 102 | 390000  | 394 |
| 1100 | 112 | 470000  | 474 |
| 1200 | 122 | 560000  | 564 |
| 1500 | 152 | 680000  | 684 |
| 1800 | 182 | 820000  | 824 |
| 2000 | 202 | 1000000 | 105 |
| 2200 | 222 |         |     |
| 2700 | 272 |         |     |

\*3 ohms max