

# Surface Mount Series 768



## Medium Body, Small Outline Products

- Low profile—board to network clearance of 0.005"/0.010"
- Conforms to EIA PDP-100 SOGN-0002
- 24mm tape & reel or slide
- Application specific circuits are available
- No internal dendrite growth
- Compatible with all solder processes  
Wave, IR reflow, Vapor phase reflow
- Recommended for bottom side attachment

## Resistance Range:

Standard: 10Ω to 1 MegΩ

## Resistance Tolerance:

Standard: ±2% or 0.5Ω (whichever is greater)  
Special: ±0.25% or 0.3Ω (whichever is greater)

## Maximum Operating Voltage:

50V not to exceed rated power

## Temperature Coefficient:

Standard: 100Ω to 1 MegΩ  
±100PPM/°C typical  
10Ω to 99Ω  
±200 PPM/°C typical

## Operating Temperature Range:

-55°C to +125°C

## Dielectric Strength:

100 VAC

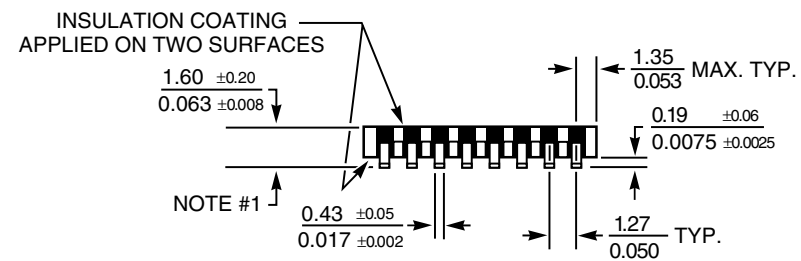
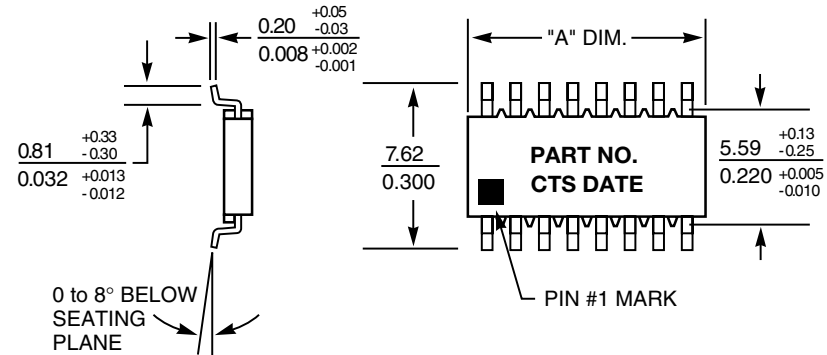
## Power Rating (Total Network Power):

	14 Pin	16 Pin	20 Pin
@25°C	2.0w	2.3w	3.0w
@70°C	1.3 w	1.5w	2.0w

## Maximum Resistor Power:

(not to exceed total network power)

Schematic	1	3	5	7
@25°C	0.15w	0.3w	0.15w	0.15w
@70°C	0.1w	0.2w	0.1w	0.1w



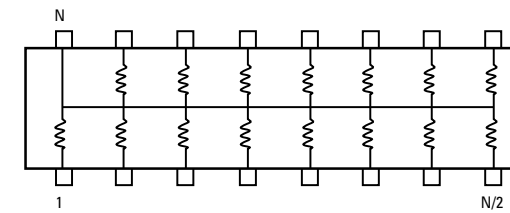
No. of Pins	"A" Dimension
14	9.91 + 0.25 / - 0.13
	0.390 + 0.010 / - 0.005
16	11.18 + 0.25 / - 0.13
	0.440 + 0.010 / - 0.005
20	13.70 + 0.25 / - 0.13
	0.540 + 0.010 / - 0.005

## Notes:

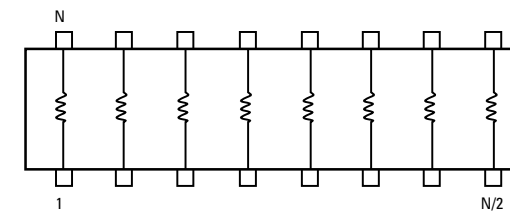
- 1 Leads to be formed to ±0.05 PLANARITY ±0.002
- 2 mm & inch DIMENSIONS ARE NOT EQUIVALENT
- 3 General Tolerances mm ±0.25  
inch ±0.010
- 4 Dimensions are mm/in.

Application Notes	pages 32-33
Power Derating	page 45
Land Patterns	pages 46-47
Packaging	pages 48-49
Environmental Performance Specifications	pages 50-51

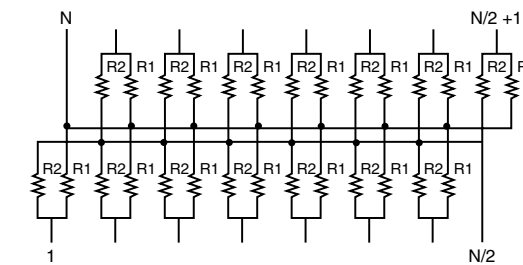
## Bussed CTS Schematic 1



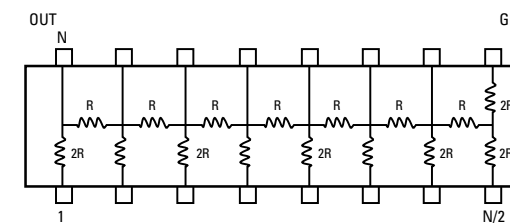
## Isolated CTS Schematic 3



## Dual Terminator CTS Schematic 5



## R/2R Ladder CTS Schematic 7

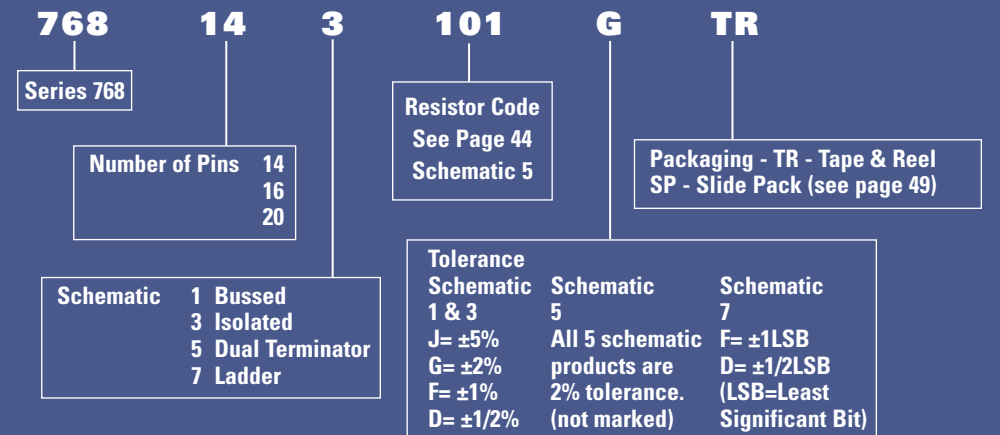


(Ohms)	EIA Code	(Ohms)	EIA Code
0 *	000X	3300	332
10	100	3900	392
12	120	4700	472
15	150	5100	512
18	180	5600	562
22	220	6800	682
27	270	8200	822
33	330	10000	103
39	390	11000	113
47	470	12000	123
51	510	15000	153
56	560	18000	183
68	680	20000	203
82	820	22000	223
100	101	27000	273
110	111	33000	333
120	121	39000	393
150	151	47000	473
180	181	56000	563
200	201	68000	683
220	221	82000	823
270	271	100000	104
330	331	110000	114
390	391	120000	124
470	471	150000	154
510	511	180000	184
560	561	200000	204
680	681	220000	224
820	821	270000	274
1000	102	330000	334
1100	112	390000	394
1200	122	470000	474
1500	152	560000	564
1800	182	680000	684
2000	202	820000	824
2200	222	1000000	105
2700	272		

\*3Ω max

## How to Order Series 768 Products

Application specific custom products 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. See pages 32-33 for application notes.



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

Example: 768143101GTR

See page 45 for part marking information.