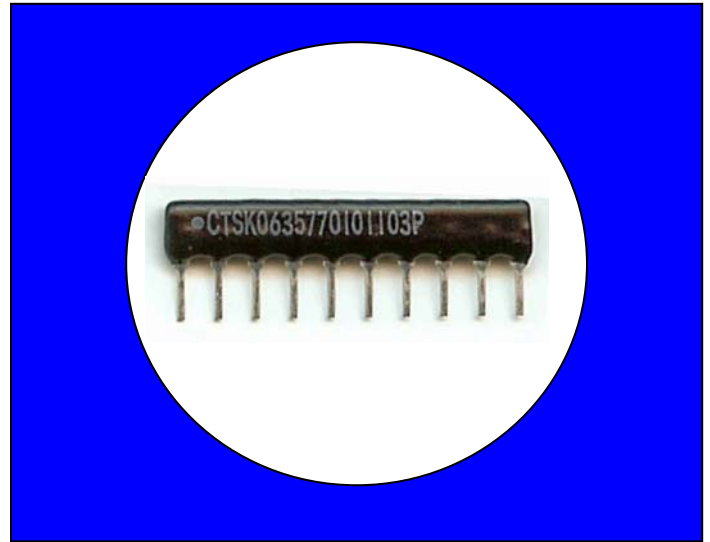


Features

- High-Reliability Cermet Resistors
- Space Saving Over Individual Resistors
- Available in Odd or Even Number of Pins From 4 to 12 Leads
- 2.54mm/.100 in. Pin Spacing
- Packaged in Bulk
- RoHS Compliant



Resistance Tolerance:

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

Resistance Range:

Standard: 10Ω to $1\text{ Meg}\Omega$

Operating Temperature Range:

-55°C to $+125^\circ\text{C}$

Dielectric Strength:

100 VAC

Temperature Coefficient:

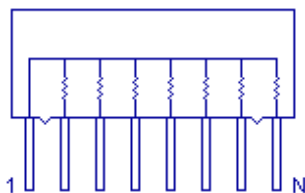
Standard: 100Ω to $1\text{ Meg}\Omega$
 $100\text{PPM}/^\circ\text{C}$ typical
 22Ω to 99Ω
 $\pm 200\text{PPM}/^\circ\text{C}$ typical

Maximum Operating Voltage:

100V not to exceed rated power

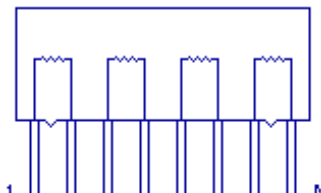
Types of Circuits

Bussed (Schematic 1)



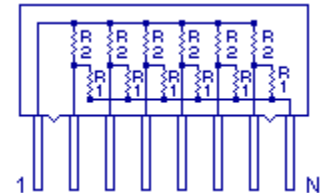
Available in 4 through 12 Pins

Isolated (Schematic 3)



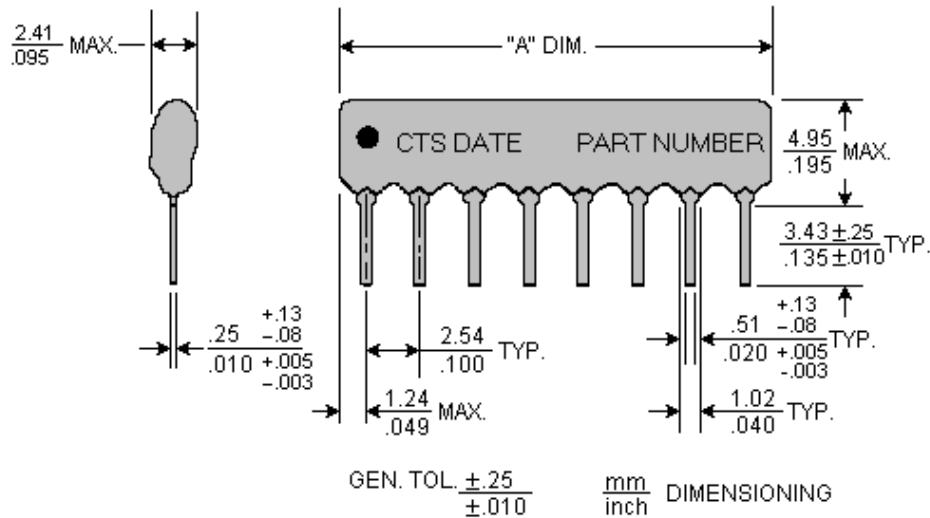
Available in 4, 6, 8, 10, 12 Pins

Dual Terminator (Schematic 5)



Available in 6, 8, 10 Pins

Package Dimensions



| Number of Pins | "A" Dimension +/-0.25/0.010 | Packaged Power @25°C | Packaged Power @70°C |
|----------------|-----------------------------|----------------------|----------------------|
| 4 | 10.11/0.398 | 0.60W | 0.40W |
| 5 | 12.65/0.498 | 0.83W | 0.52W |
| 6 | 15.19/0.598 | 0.96W | 0.64W |
| 7 | 17.30/0.698 | 1.18W | 0.76W |
| 8 | 20.27/0.798 | 1.32W | 0.88W |
| 9 | 22.81/0.898 | 1.49W | 1.00W |
| 10 | 25.35/0.998 | 1.66W | 1.11W |
| 11 | 27.89/1.098 | 1.83W | 1.24W |
| 12 | 30.43/1.198 | 2.00W | 1.35W |
| Schematic | | Packaged Power @25°C | Packaged Power @70°C |
| 1 & 5 | | 0.15W | 0.10W |
| 3 | | 0.30W | 0.20W |

NOTES:

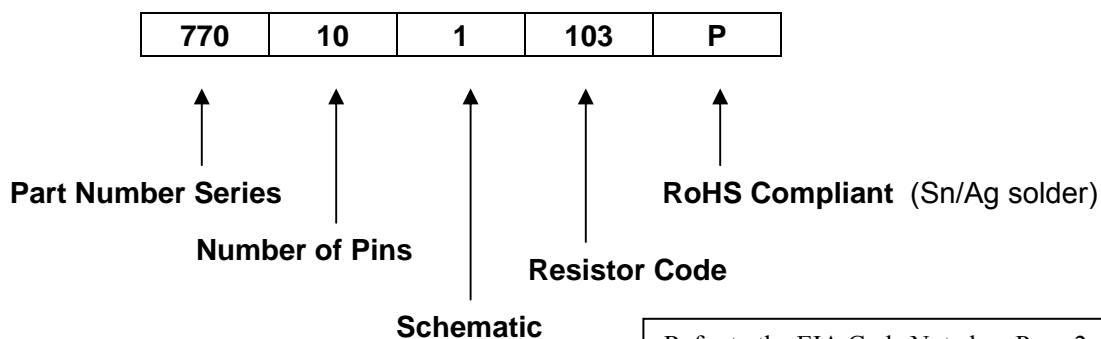
*General Tolerances
mm +/-0.25
inch +/-0.010

*Copper Alloy Leads,
Solder-coated

Standard Resistor Values & EIA Code

| Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 10 | 100 | 75 | 750 | 510 | 511 | 3.9K | 392 | 33K | 333 | 270K | 274 |
| 12 | 120 | 82 | 820 | 560 | 561 | 4.7K | 472 | 39K | 393 | 330K | 334 |
| 15 | 150 | 100 | 101 | 680 | 681 | 5.1K | 512 | 47K | 473 | 390K | 394 |
| 18 | 180 | 110 | 111 | 820 | 821 | 5.6K | 562 | 51K | 513 | 470K | 474 |
| 22 | 220 | 120 | 121 | 1K | 102 | 6.8K | 682 | 56K | 563 | 510K | 514 |
| 27 | 270 | 150 | 151 | 1.2K | 122 | 8.2K | 822 | 68K | 683 | 560K | 564 |
| 33 | 330 | 180 | 181 | 1.5K | 152 | 10K | 103 | 82K | 823 | 680K | 684 |
| 39 | 390 | 220 | 221 | 1.8K | 182 | 12K | 123 | 100K | 104 | 820K | 824 |
| 47 | 470 | 270 | 271 | 2.0K | 202 | 15K | 153 | 120K | 124 | 1M | 105 |
| 51 | 510 | 330 | 331 | 2.2K | 222 | 18K | 183 | 150K | 154 | | |
| 56 | 560 | 390 | 391 | 2.7K | 272 | 22K | 223 | 180K | 184 | | |
| 68 | 680 | 470 | 471 | 3.3K | 332 | 27K | 273 | 220K | 224 | | |

How to Order



NOTE: No dashes or spaces to appear in part number.
Example: 770101103P

| | |
|---|-----------------|
| 1 | Bussed |
| 3 | Isolated |
| 5 | Dual Terminator |

Refer to the EIA Code Noted on Page 2.
Resistor Code Schematics 1 & 3
Resistor Value Schematic 5
Example 220/330 = 220Ω/330Ω
All part numbers are ±2%

Packaging

Bulk Pack All Products 250 Parts/Bag

Environmental Performance Specifications

| Test | Max. % Delta R | Mil. Std. 202 Method | Test Cond. | Test Description |
|-----------------------------|-------------------|-------------------------|------------|---|
| Thermal Cycling | 0.5% | 107 | B | 5 cycles, -65°C to +125°C |
| Short Time Overload | 0.5% | | | 2 1/2 x rated voltage, 5 sec (100V Max.) |
| Moisture Resistance | 0.5% | 106 | | 240 hours, 0.1 rated load, -10°C to +65°C, 90% RH |
| Load Humidity | 1.0% | | | 1000 hours, 0.1 rated load, 70°C, 85-92% RH |
| High Temp Exposure | 1.0% | | | 240 hours, no load, @ 125°C |
| Load Life | 1.0% | 108 | D | 1000 hours @ 70°C rated load |
| Resistance to Solder Heat | 0.25% | | A | 3 second dwell @ 350°C, dwell |
| Mechanical Shock | 0.25% | 213 | I | 100g, 1 msec., 3 shocks each plane |
| Vibration | 0.25% | 204 | D | 20g, 10-2000Hz, 4 hours/plane |
| Terminal Strength | 0.25% | | | 2.0 Kg. pull, 30 sec., three 45° bends |
| Low Temp Storage | 0.25% | | | 24 hours @ -65°C, no load |
| Low Temp Operation | 0.25% | | | 45 min @ -65°C, full load |
| Flammability | N/A | | | 94V-0 |
| Non-Fungus per MIL-STD 810C | | | | |
| Resistance to Solvents | | | | Isopropyl alcohol |
| Solderability | | | | RMA Flux, 230°C, 5 seconds dip, 95% coverage |