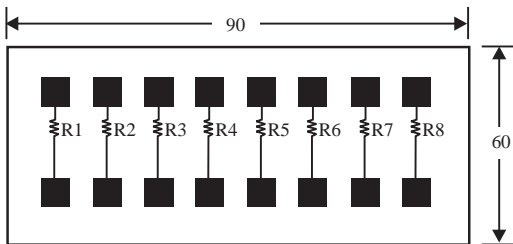




ISOLATED RESISTOR NETWORK

California Micro Devices' resistor arrays are the hybrid equivalent to the isolated resistor networks available in surface mount packages. The resistors are spaced on ten mil centers resulting in reduced real estate. These chips are manufactured using advanced thin film processing techniques and are 100% electrically tested and visually inspected.

| ELECTRICAL SPECIFICATIONS | | | |
|-----------------------------|--|------------------------|--------|
| Parameter | Test Condition | | |
| TCR | -55°C to +125° | ±100ppm/°C | Max |
| Operating Voltage | -55°C to +125° | 50Vdc | Max |
| Power Rating (per resistor) | @ 70°C (Derate linearly to zero @ 150°C) | 50mw | Max |
| Thermal Shock | Method 107 MIL-STD-202F | ±0.25%ΔR | Max |
| High Temperature Exposure | 100 Hrs @ 150°C Ambient | ±0.25%ΔR | Max |
| Moisture Resistance | Method 106 MIL-STD-202F | ±0.5%ΔR | Max |
| Life | Method 108 MIL-STD-202F (125°C/1000hr) | ±0.5%ΔR | Max |
| Noise | Method 308 MIL-STD-202F | -35 dB | Max |
| | | ≥250kΩ | -30 dB |
| Short Time Overload | MIL-R-83401 | 0.25% | Max |
| Insulation Resistance | @25°C | 1 X 10 ¹² Ω | Min |



| VALUES |
|-------------------------------|
| 8 resistors from 100Ω to 346Ω |

| MECHANICAL SPECIFICATIONS | |
|---------------------------|--|
| Substrate | Silicon 10±2 mils thick |
| Isolation Layer | SiO ₂ 10,000Å thick, min |
| Backing | Lapped (gold optional) |
| Metalization | Aluminum 10,000Å thick, min (15,000Å gold optional) |
| Passivation | Silicon nitride |

Formats

Die Size: 90±3 x 60±3 mils
Bonding Pads: 5x7 mils typical

| PACKAGING |
|---|
| Two inch square trays of 196 chips maximum. |

| NOTES |
|---|
| 1. Resistor pattern may vary from one value to another. |

| PART NUMBER DESIGNATION N | | | | | | |
|---------------------------|---|---|--|---|---|---|
| CC | 5003 | F | A | G | W | P |
| Series | Value First 3 digits are significant value. Last digit represents number of zeroes. R indicates decimal point. | Tolerance D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10% M = ±20% | TCR No Letter = ±100ppm A = ±50% B = ±25% | Bond Pads G = Gold No Letter = Aluminum | Backing W = Gold L = Lapped No Letter = Either | Ratio Tolerance No Letter = ±1% P = ±0.5% |