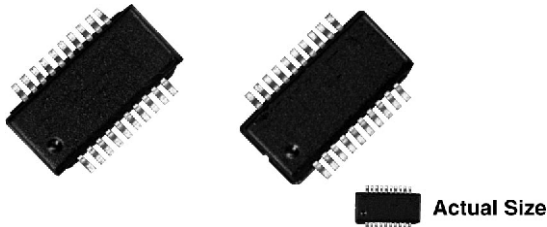


Molded, 25 mil Pitch, Dual-In-Line Thin Film Resistor, Surface Mount Network



OSOP Series resistor networks feature a space saving 25 mil lead pitch versus the current 50 mil pitch standard. This allows users to reduce board space more than 50 % over current standards. The OSOP Series feature 10 isolated resistors in a 20 lead style available for immediate delivery in the standard values listed.

SCHEMATIC



FEATURES

- 0.068" (1.73 mm) maximum seated height
- Rugged molded case construction with no internal solder
- JEDEC MO-137 variation AD
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS*
COMPLIANT
HALOGEN
FREE

Note

* Pb containing terminations are not RoHS compliant, exemptions may apply

TYPICAL PERFORMANCE

| | ABSOLUTE | TRACKING |
|------|----------|----------|
| TCR | 25 | 5 |
| | ABSOLUTE | RATIO |
| TOL. | 0.1 | 0.05 |

STANDARD RESISTANCE OFFERING (R₁ =)

| | |
|-------|--------|
| 500 Ω | 10 kΩ |
| 1 kΩ | 20 kΩ |
| 2 kΩ | 50 kΩ |
| 5 kΩ | 100 kΩ |

Note

- Consult factory for additional values and schematics

| STANDARD ELECTRICAL SPECIFICATIONS | | |
|------------------------------------|--|---------------------|
| TEST | SPECIFICATIONS | CONDITIONS |
| Material | Passivated nichrome | - |
| Pin/Lead Number | 20 | - |
| Resistance Range | 500 Ω to 100 kΩ per resistor | - |
| TCR: Absolute | ± 25 ppm/°C | - 55 °C to + 125 °C |
| TCR: Tracking | ± 5 ppm/°C | - 55 °C to + 125 °C |
| Tolerance: Absolute | ± 0.1 % to 1 % | + 25 °C |
| Tolerance: Ratio | ± 0.025 % to 0.5 % | + 25 °C |
| Power Rating: Resistor | 100 mW | Maximum at + 70 °C |
| Power Rating: Package | 400 mW | Maximum at + 70 °C |
| Stability: Absolute | ΔR ± 0.05 % | 2000 h at + 70 °C |
| Stability: Ratio | ΔR ± 0.015 % | 2000 h at + 70 °C |
| Voltage Coefficient | < 0.1 ppm/V (typical) | - |
| Working Voltage | 100 V max. not to exceed $\sqrt{P \times R}$ | - |
| Operating Temperature Range | - 55 °C to + 125 °C | - |
| Storage Temperature Range | - 55 °C to + 150 °C | - |
| Noise | < - 30 dB | - |
| Thermal EMF | 0.08 μV/°C | - |
| Shelf Life Stability: Absolute | ΔR ± 0.01 % | 1 year at + 25 °C |
| Shelf Life Stability: Ratio | ΔR ± 0.002 % | 1 year at + 25 °C |

| DIMENSIONS AND IMPRINTING in inches and millimeters | | | |
|---|-----------|---------------|-------------|
| | DIMENSION | INCHES | MILLIMETERS |
| | A | 0.344 | 8.74 |
| | B | 0.154 | 3.91 |
| | C | 0.237 | 6.02 |
| | D | 0.025 | 0.635 |
| | E | 0.010 ± 0.002 | 0.25 ± 0.05 |
| | F | 0.062 | 1.58 |
| | G | 0.068 | 1.73 |
| | H | 0.010 ± 0.002 | 0.25 ± 0.05 |
| | I | 0.025 | 0.64 |
| | J | 0.057 | 1.47 |

| MECHANICAL SPECIFICATIONS | |
|------------------------------------|---------------------|
| Resistive Element | Passivated nichrome |
| Substrate Material | Silicon |
| Body | Molded epoxy |
| Terminals | Copper alloy |
| Lead (Pb)-free Option | 100 % matte tin |
| Tin Lead Option | Sn90 |
| Tin Lead and Lead (Pb)-free Finish | Plated |

| GLOBAL PART NUMBER INFORMATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|-----------|-------|---------------------------------|--------|------------------|-------|-------------------|-------|------------------|-------|----------------|-------|---------------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|
| New Global Part Numbering: OSOPA1002BUF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="0" style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; padding: 2px;">O</td> <td style="border: 1px solid black; padding: 2px;">S</td> <td style="border: 1px solid black; padding: 2px;">O</td> <td style="border: 1px solid black; padding: 2px;">P</td> <td style="border: 1px solid black; padding: 2px;">A</td> <td style="border: 1px solid black; padding: 2px;">1</td> <td style="border: 1px solid black; padding: 2px;">0</td> <td style="border: 1px solid black; padding: 2px;">0</td> <td style="border: 1px solid black; padding: 2px;">2</td> <td style="border: 1px solid black; padding: 2px;">B</td> <td style="border: 1px solid black; padding: 2px;">U</td> <td style="border: 1px solid black; padding: 2px;">F</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">O</td> <td style="border: 1px solid black; padding: 2px;">S</td> <td style="border: 1px solid black; padding: 2px;">O</td> <td style="border: 1px solid black; padding: 2px;">P</td> <td style="border: 1px solid black; padding: 2px;">T</td> <td style="border: 1px solid black; padding: 2px;">A</td> <td style="border: 1px solid black; padding: 2px;">1</td> <td style="border: 1px solid black; padding: 2px;">0</td> <td style="border: 1px solid black; padding: 2px;">0</td> <td style="border: 1px solid black; padding: 2px;">3</td> <td style="border: 1px solid black; padding: 2px;">A</td> <td style="border: 1px solid black; padding: 2px;">T</td> <td style="border: 1px solid black; padding: 2px;">1</td> </tr> </table> | | | | | O | S | O | P | A | 1 | 0 | 0 | 2 | B | U | F | O | S | O | P | T | A | 1 | 0 | 0 | 3 | A | T | 1 |
| O | S | O | P | A | 1 | 0 | 0 | 2 | B | U | F | | | | | | | | | | | | | | | | | | |
| O | S | O | P | T | A | 1 | 0 | 0 | 3 | A | T | 1 | | | | | | | | | | | | | | | | | |
| GLOBAL MODEL (4 or 5 digits) | SCHEMATIC | RESISTANCE | TOLERANCE AND RATIO TOLERANCE | PACKAGING | | | | | | | | | | | | | | | | | | | | | | | | | |
| OSOP (Tin Lead) OSOPT (Lead (Pb)-free) (e3) | A = 10 nominally equal resistors with each resistor isolated from all others and wires directly across | First 3 digits are significant figures and the last digit specifies the number of zeroes to follow. Example: 1002 = 10K 1003 = 100K | <table border="0"> <tr> <td>Abs. Tol.</td> <td>Ratio</td> </tr> <tr> <td>A = 0.1 % ⁽¹⁾</td> <td>0.05 %</td> </tr> <tr> <td>B = 0.1 %</td> <td>0.1 %</td> </tr> <tr> <td>C = 0.25 %</td> <td>0.1 %</td> </tr> <tr> <td>D = 0.5 %</td> <td>0.1 %</td> </tr> <tr> <td>F = 1 %</td> <td>0.5 %</td> </tr> <tr> <td>Z = 0.1 % ⁽¹⁾</td> <td>0.025 %</td> </tr> </table> | Abs. Tol. | Ratio | A = 0.1 % ⁽¹⁾ | 0.05 % | B = 0.1 % | 0.1 % | C = 0.25 % | 0.1 % | D = 0.5 % | 0.1 % | F = 1 % | 0.5 % | Z = 0.1 % ⁽¹⁾ | 0.025 % | TAPE AND REEL T0 = 100 min., 100 mult T1 = 1000 min., 1000 mult ⁽²⁾ T3 = 300 min., 300 mult T5 = 500 min., 500 mult TF = Full reel 2500 TS = 100 min., 1 mult UF = TUBED | | | | | | | | | | | |
| Abs. Tol. | Ratio | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A = 0.1 % ⁽¹⁾ | 0.05 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B = 0.1 % | 0.1 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C = 0.25 % | 0.1 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D = 0.5 % | 0.1 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F = 1 % | 0.5 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z = 0.1 % ⁽¹⁾ | 0.025 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Historical Part Number example: OSOPA5000B (for reference purposes only) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OSOP | A | 5000 | B | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SERIES | SCHEMATIC | RESISTANCE | TOLERANCE AND RATIO TOLERANCE | | | | | | | | | | | | | | | | | | | | | | | | | | |

Notes

- (1) Tolerance available 1K and up
 (2) Preferred packaging code



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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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