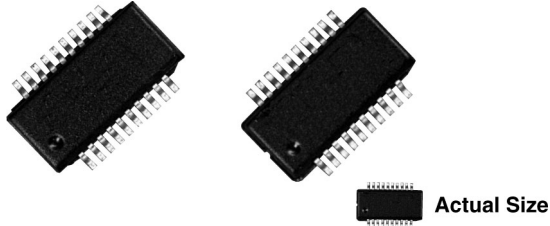
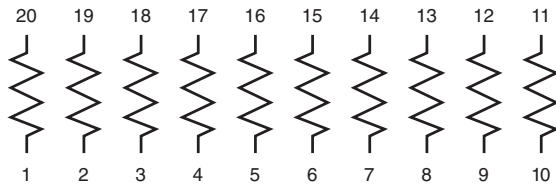


Molded, 25 mil Pitch, Dual-In-Line Resistor, Surface Mount Network



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


RoHS*
COMPLIANT

TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.05

STANDARD RESISTANCE OFFERING ($R_1 =$)

500 Ω	10 k Ω
1 k Ω	20 k Ω
2 k Ω	50 k Ω
5 k Ω	100 k Ω

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 k Ω per resistor	-
TCR: Absolute	± 25 ppm/ $^{\circ}$ C	- 55 $^{\circ}$ C to + 125 $^{\circ}$ C
TCR: Tracking	± 5 ppm/ $^{\circ}$ C	- 55 $^{\circ}$ C to + 125 $^{\circ}$ C
Tolerance: Absolute	± 0.1 % to 1 %	+ 25 $^{\circ}$ C
Tolerance: Ratio	± 0.025 % to 0.5 %	+ 25 $^{\circ}$ C
Power Rating: Resistor	100 mW	Maximum at + 70 $^{\circ}$ C
Power Rating: Package	400 mW	Maximum at + 70 $^{\circ}$ C
Stability: Absolute	$\Delta R \pm 0.05$ %	2000 h at + 70 $^{\circ}$ C
Stability: Ratio	$\Delta R \pm 0.015$ %	2000 h at + 70 $^{\circ}$ C
Voltage Coefficient	< 0.1 ppm/V (typical)	-
Working Voltage	100 V max. not to exceed $\sqrt{P \times R}$	-
Operating Temperature Range	- 55 $^{\circ}$ C to + 125 $^{\circ}$ C	-
Storage Temperature Range	- 55 $^{\circ}$ C to + 150 $^{\circ}$ C	-
Noise	< - 30 dB	-
Thermal EMF	0.08 μ V/ $^{\circ}$ C	-
Shelf Life Stability: Absolute	$\Delta R \pm 0.01$ %	1 year at + 25 $^{\circ}$ C
Shelf Life Stability: Ratio	$\Delta R \pm 0.002$ %	1 year at + 25 $^{\circ}$ C

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

DIMENSIONS AND IMPRINTING in inches and millimeters

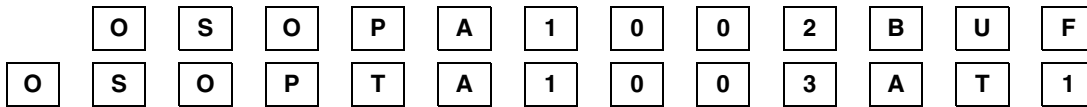
	DIMENSION	INCHES	MILLIMETERS
	A	0.344	8.74
B	0.154	3.91	
C	0.237	6.02	
D	0.025	0.635	
E	0.010 ± 0.002	0.25 ± 0.05	
F	0.062	1.58	
G	0.068	1.73	
H	0.010 ± 0.002	0.25 ± 0.05	
I	0.025	0.64	
J	0.057	1.47	

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

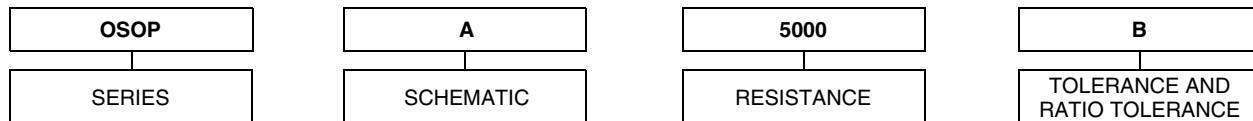
GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: OSOPA1002BUF



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="1"> <thead> <tr> <th>Abs. Tol.</th> <th>Ratio</th> </tr> </thead> <tbody> <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> </tbody> </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)



Notes

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



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