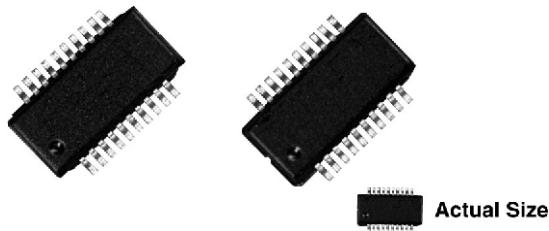
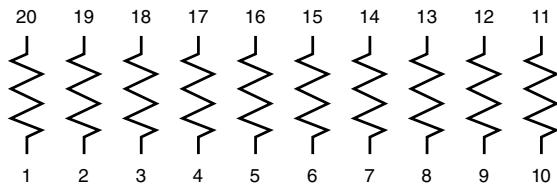


## Molded, 25 mil Pitch, Dual-In-Line Thin Film Resistor, Surface Mount Network



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



### 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 (R<sub>1</sub> =)

500 $\Omega$	10 k $\Omega$
1 k $\Omega$	20 k $\Omega$
2 k $\Omega$	50 k $\Omega$
5 k $\Omega$	100 k $\Omega$

### Note

- Consult factory for additional values and schematics

STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	20	-
Resistance Range	500 $\Omega$ to 100 k $\Omega$ per resistor	-
TCR: Absolute	$\pm 25$ ppm/ $^{\circ}$ C	-55 $^{\circ}$ C to + 125 $^{\circ}$ C
TCR: Tracking	$\pm 5$ ppm/ $^{\circ}$ C	-55 $^{\circ}$ C to + 125 $^{\circ}$ C
Tolerance: Absolute	$\pm 0.1$ % to 1 %	+ 25 $^{\circ}$ C
Tolerance: Ratio	$\pm 0.025$ % 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 $\mu$ 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

**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

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)		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			Abs. Tol.	Ratio	TAPE AND REEL  T0 = 100 min., 100 mult T1 = 1000 min., 1000 mult T3 = 300 min., 300 mult T5 = 500 min., 500 mult TF = Full reel 2500 TS = 100 min., 1 mult  UF = TUBED				
OSOPT (Lead (Pb)-free) (e3)							A = 0.1 % <sup>(1)</sup>	0.05 %					
							B = 0.1 %	0.1 %					
							C = 0.25 %	0.1 %					
							D = 0.5 %	0.1 %					
							F = 1 %	0.5 %					
							Z = 0.1 % <sup>(1)</sup>	0.025 %					
Historical Part Number example: OSOPA5000B (for reference purposes only)													
OSOP			A			5000			B				
SERIES			SCHEMATIC			RESISTANCE			TOLERANCE AND RATIO TOLERANCE				

**Notes**
<sup>(1)</sup> Tolerance available 1K and up

<sup>(2)</sup> Preferred packaging code

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<http://moschip.ru/get-element>

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