



THIN FILM RESISTOR NETWORK

OSOP Series

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



KEY BENEFITS

- TCR: 25 ppm/°C absolute and 5 ppm/°C tracking
- Tolerance: absolute as low as 0.1 % and ratio tolerance as low as 0.025 %
- Resistance range from 500 Ω to 100 k Ω per element
- JEDEC[®] MO-137 variation AB = 16 pin, AD = 20 pin, AE = 24 pin

APPLICATIONS

- Precision voltage dividers
- Telecommunications
- Industrial process control
- Medical instrumentation

RESOURCES

- Datasheet: OSOP - www.vishay.com/doc?60002
- For technical questions contact thinfilm@vishay.com
- Material categorization: for definitions of compliance, please see - www.vishay.com/99912



RoHS
AVAILABLE

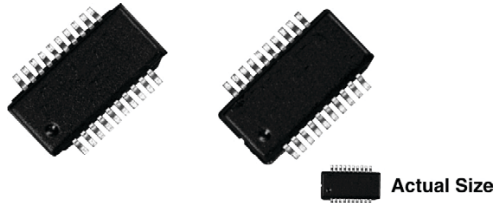
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THIN FILM RESISTOR NETWORK

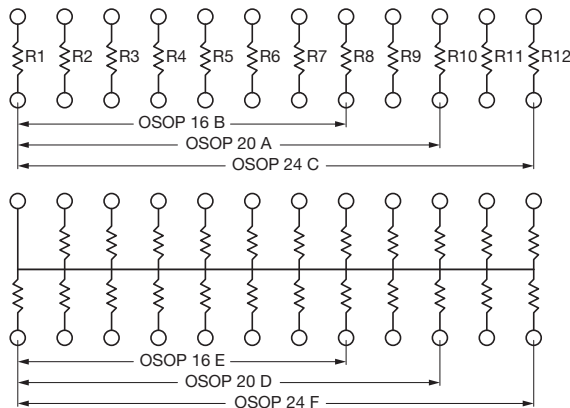
OSOP Series

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 features 16-, 20-, and 24-pin variations with isolated and last pin common schematics. Custom schematics and resistor values are also available, consult factory.

SCHEMATIC



FEATURES

- 0.068" (1.73 mm) maximum seated height
- Rugged molded case construction with no internal solder
- JEDEC® MO-137 variation AB = 16 pin, AD = 20 pin, AE = 24 pin
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

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	16, 20, 24	-
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

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