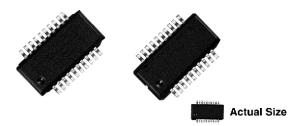
# Vishay Dale Thin Film

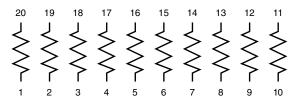




www.vishay.com

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**

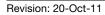
$\bullet$	ABSOLUTE TRACKING		
TCR	25	5	
	ABSOLUTE	RATIO	
TOL.	0.1	0.05	

STANDARD RESISTANCE OFFERING ( $R_1 =$ )		
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 $\Omega$ to 100 k $\Omega$ 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	$\Delta R \pm 0.05 \%$	2000 h at + 70 °C	
Stability: Ratio	Δ <i>R</i> ± 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	Δ <i>R</i> ± 0.01 %	1 year at + 25 °C	
Shelf Life Stability: Ratio	∆ <i>R</i> ± 0.002 %	1 year at + 25 °C	



1 For technical questions, contact: thinfilm@vishay.com Document Number: 60002

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RoHS

COMPLIANT HALOGEN

FREE

OSOP

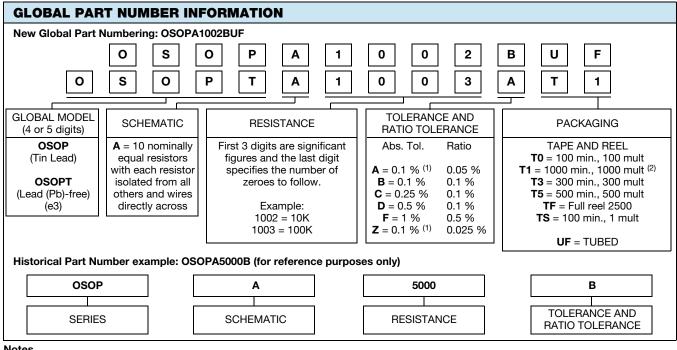




Vishay Dale Thin Film

DIMENSIONS AND IMPRINTING in inches and millimeters				
	DIMENSION	INCHES	MILLIMETERS	
Logo $A$ $D \rightarrow   J$ Part $A$ $Number Marking$ PIN 1 $D = 0$	А	0.344	8.74	
	В	0.154	3.91	
	С	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	
	Н	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	



Notes

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

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



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