

# Wirewound Resistors, Industrial Power, Tubular, Flat, Oval, Fixed, OVSF



## FEATURES

- Terminal bands are spotwelded onto the insulated core and resistance-alloy wire is precisely wound onto the oval core
- The wire is spotwelded to the terminal bands and then “locked” onto the core with a silicone or cement coating
- Available as fixed and adjustable resistors (for adjustable Oval Resistor see [www.vishay.com/doc?31836](http://www.vishay.com/doc?31836))
- Wirewound
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS  
COMPLIANT**

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING W	RESISTANCE RANGE $\Omega$	TOLERANCE <sup>(1)</sup> $\pm$ %	TERMINAL STYLE
OVSF0030	16-20 $\Omega$ Oval	30	1.2 to 7.3K	5	A
OVSF0040	16-32 $\Omega$ Oval	40	1.7 to 27K	5	A
OVSF0055	16-56 $\Omega$ Oval	55	2.4 to 85K	5	A
OVSF0070	16-76 $\Omega$ Oval	70	3.0 to 137K	5	A
OVSF0095	16-96 $\Omega$ Oval	95	4.1 to 171K	5	A

### Notes

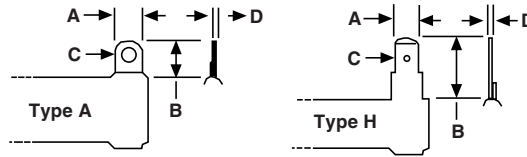
- Ratings are based on a temperature rise of 300 °C above an ambient of 40 °C.
- <sup>(1)</sup> Standard fixed resistance tolerance  $\pm$  5 %. Resistance values less than 1  $\Omega$  and adjustable have  $\pm$  10 % tolerance. Closer tolerances available upon request.

DERATING FOR GROUP INSTALLATIONS		
NUMBER OF RESISTORS STACKED	% OF SINGLE RATING	
	VERTICAL CHASSIS	HORIZONTAL CHASSIS
2	80	75
3	70	60
4	65	50

### Notes

- Ratings are based on mounting on a steel panel 10" x 10" x 0.040". Derate by 29 % when mounting on non-heat conductive surface.

DIMENSIONS in inches (millimeters)				
GLOBAL MODEL	DISTANCE BETWEEN TERMINALS		OVERALL LENGTH	WEIGHT (TYP.) g
	A	L		
OVSF0030	2 (50.8)	1.25 (31.75)	= A + 0.625 (15.875)	15
OVSF0040	2.75 (69.85)	2 (50.8)	= A + 0.625 (15.875)	24
OVSF0055	4.25 (107.95)	3.5 (88.9)	= A + 0.625 (15.875)	37
OVSF0070	5.5 (139.7)	4.75 (120.65)	= A + 0.625 (15.875)	45
OVSF0095	6.75 (171.45)	6 (152.4)	= A + 0.625 (15.875)	60

**TERMINAL STYLE** in inches (millimeters)


DIMENSIONS	A (3/16" LUG)	H (1/4" SQC)
Width (A)	0.1875 (4.7625)	0.25 (6.35)
Height (B)	0.375 (9.525)	0.625 (15.875)
Dia. (C)	0.13 (3.302)	0.065 (1.651)
Thickness (D)	0.02 (0.508)	0.032 (0.8128)

**MATERIAL SPECIFICATIONS**

Element	Copper-nickel, nickel-chrome, iron-chrome-aluminum
Core	Steatite
Coating	High temperature silicone
Standard terminals	Nickel-iron
Part marking	Value, date code, MRC

**GLOBAL PART NUMBER INFORMATION**

 Global Part Numbering example: **OVSF0070137K0JHB00** (OVSF0070 137K 5% 1/4SQC B)

MODEL (2 digits)	COATING (1 digit)	TYPE (1 digit)	SIZE (4 digits)	VALUE (5 digits)	TOLERANCE (1 digit)	TERMINAL (1 digit)	PACKAGING (1 digit)	SPECIAL (2 digits)
<b>OV</b>	<b>S</b> = Silicone	<b>F</b> = Fixed	<b>0030</b> = 30 W <b>0095</b> = 95 W  Available sizes: 0030 0040 0055 0070 0095	<b>R</b> = Decimal <b>K</b> = Thousand <b>R1500</b> = 0.15 Ω <b>1K500</b> = 1.5 kΩ  Check datasheet for available value range	<b>J</b> = ± 5.0 % <b>K</b> = ± 10 %	<b>A</b> = 3/16" lug (3/16L) <b>H</b> = 1/4" single quick-connect (1/4SQC)	<b>B</b> = Bulk	<b>00</b> = Standard <b>NI</b> = Non-inductive <b>NS</b> = No strips and spacers



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.