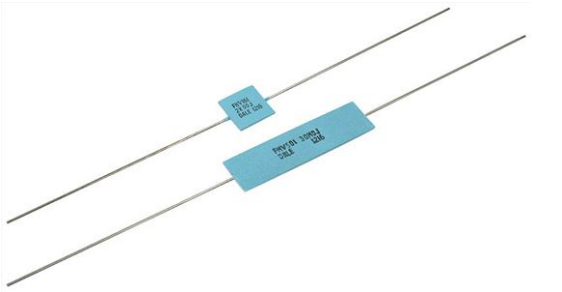
Thick Film Planar Resistors, Through-Hole, Axial Lead, High Voltage



FEATURES

- Non-inductive design
- Matched sets available
- Special testing available
- Low TCR: ± 200 ppm/°C standard, ± 100 ppm/°C available
- Tolerance: ± 10 %, ± 5 %, ± 2 %, ± 1 % standard
- Tolerance and/or TCR matching available upon request
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb Available

e3 RoHS* Available

HALOGEN FREE

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.

MECHANICAL SPECIFICATIONS

Terminal Strength: 5 pound pull test
Solderability: Continuous satisfactory coverage when tested in accordance with MIL-R-10509

MATERIAL SPECIFICATIONS

Resistive Element: High temperature fired cermet film
Core: High purity 96 % alumina
Coating: Flameproof silicone
Termination: Standard lead material is tin plated copper

TEMPERATURE COEFFICIENT CODE		
CODE	TEMPERATURE COEFFICIENT	RANGE
K	± 100 ppm/°C	- 55 °C to + 125 °C
N	± 200 ppm/°C	- 55 °C to + 125 °C

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL/ SIZE	POWER RATING $P_{70\,°C}$ W	POWER RATING $P_{125\,°C}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C
FHV026	0.25	0.125	750	10K to 100M	1, 2, 5, 10	100, 200
FHV051	0.50	0.25	1.5K	10K to 100M	1, 2, 5, 10	100
				10K to 500M	1, 2, 5, 10	200
FHV076	0.25	0.125	3.75K	500 to 500M	1, 2, 5, 10	100
				100 to 1G	1, 2, 5, 10	200
FHV101	1	0.50	7.5K	500 to 1G	1, 2, 5, 10	100
				100 to 1G	1, 2, 5, 10	200
				1.1G to 2G	5, 10	200
FHV151	1.5	0.75	11.25K	1M to 1G	1, 2, 5, 10	100
				10K to 1G	1, 2, 5, 10	200
				1.1G to 2G	5, 10	200
FHV161	1	0.50	3.5K	500 to 1G	1, 2, 5, 10	100
				100 to 1G	1, 2, 5, 10	200
				1.1G to 2G	5, 10	200
FHV201	2	1	15K	500M to 1G	1, 2, 5, 10	100
				200 to 1G	1, 2, 5, 10	200
				1.1G to 8G	5, 10	200
FHV401	2	1	7.5K	1M to 1G	1, 2, 5, 10	100
				20K to 1G	1, 2, 5, 10	200
				1.1G to 2G	5, 10	200
FHV501	4	2	15K	1M to 1G	1, 2, 5, 10	100
				30K to 1G	1, 2, 5, 10	200
				1.1G to 10G	5, 10	200

Notes

(1) Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less.

(2) All resistance values are calibrated at 100 V_{DC}. Calibration at other voltages upon request.

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: FHV07623K2FKEB (preferred part number format)

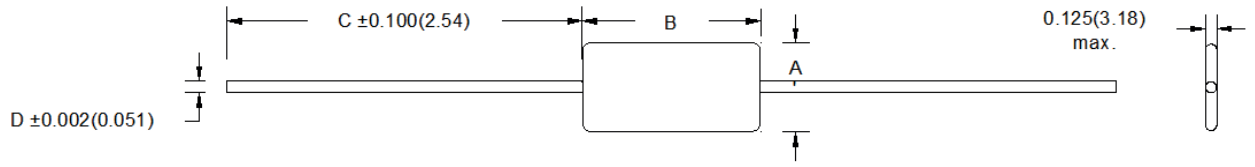
F	H	V	0	2	5	1	0	K	0	F	N	E	B

GLOBAL MODEL	SIZE	RESISTANCE VALUE	TOLERANCE	TCR	TERMINAL FINISH	PACKAGING
FHV	**026** **051** **076** **101** **151** **161** **201** **401** **501**	R = Ω K = kΩ M = MΩ G = GΩ **400R** = 400 Ω **1M02** = 1.02 MΩ **10G0** = 10 GΩ	**F** = ± 1.0 % **G** = ± 2.0 % **J** = ± 5.0 % **K** = ± 10.0 %	**K** = 100 ppm **N** = 200 ppm	**E** = Sn100 **R** = Sn60/Pb40	**B** = Bulk **W** = Tray

Note

- For additional information on packaging, refer to the Through Hole Resistor Packaging document (www.vishay.com/doc?31544).

DIMENSIONS in inches (millimeters)

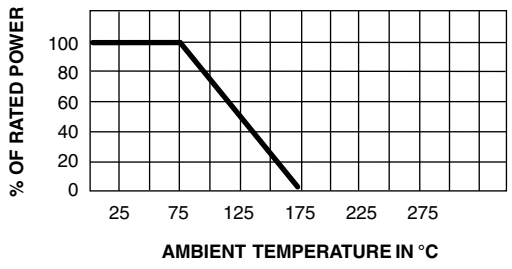


MODEL - SIZE	A (max.) Height	B (max.) Length	C Lead Length	D Lead DIA
FHV026	0.300 (7.62)	0.300 (7.62)	1.50 (38.10)	0.018 (0.457)
FHV051	0.380 (9.65)	0.380 (9.65)	1.50 (38.10)	0.020 (0.508)
FHV076	0.210 (5.33)	0.570 (14.48)	1.50 (38.10)	0.025 (0.635)
FHV101	0.280 (7.11)	1.07 (27.18)	1.50 (38.10)	0.032 (0.813)
FHV151	0.339 (8.38)	1.57 (39.88)	1.50 (38.10)	0.032 (0.813)
FHV161	0.550 (13.97)	0.550 (13.97)	1.50 (38.10)	0.032 (0.813)
FHV201	0.330 (8.38)	2.04 (51.82)	1.50 (38.10)	0.032 (0.813)
FHV401	0.550 (13.97)	1.05 (26.67)	1.50 (38.10)	0.032 (0.813)
FHV501	0.550 (13.97)	2.07 (52.58)	1.50 (38.10)	0.032 (0.813)

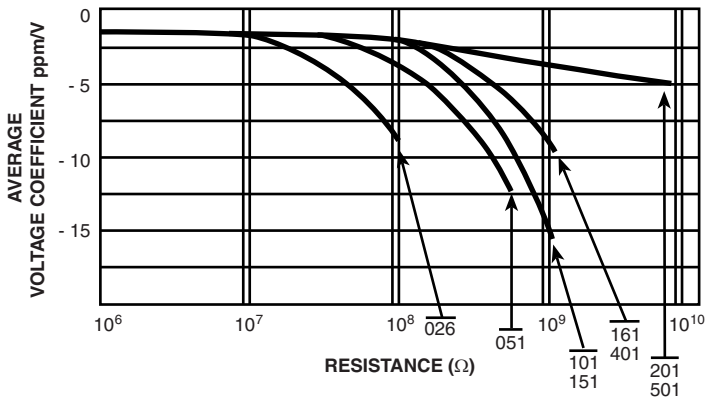
ENVIRONMENTAL PERFORMANCE

TEST	MAXIMUM ΔR (Typical Test Lots)
Short time overload	< ± 0.2 %
Moisture resistance	< ± 0.5 %
Shock	< ± 0.2 %
Vibration	< ± 0.2 %
Temperature cycling	< ± 0.5 %
Load life	< ± 1.0 %
Dielectric withstanding voltage	< ± 0.15 %
Resistance to soldering heat	< ± 0.1 %

DERATING



VOLTAGE COEFFICIENT



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