

FP

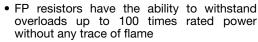
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Metal Film Resistors, Industrial, Flameproof

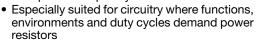


FEATURES

- · Small physical size
- Low cost











RoHS*

- Electroplated tin-lead or lead (Pb)-free solder finish leads
- Tighter tolerances available on request
- Material categorization: For definitions of compliance please see <u>www.vishav.com/doc?99912</u>

Note

* Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P _{25°C} W	POWER RATING P _{40 °C} W	POWER RATING P _{70°C} W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C	
FP01/2	FP1/2	-	-	0.5	350	10 to 1M	1, 2, 5, 10	150	
FP0001	FP1	-	-	1	500	10 to 1M	1, 2, 5, 10	150	
FP0032	FP32	-	-	1	500	10 to 1M	1, 2, 5, 10	150	
FP0002	FP2	3.5	3	2	500	25 to 125K	1, 2, 5, 10	150	
FP0042	FP42	-	-	2	500	25 to 125K	1, 2, 5, 10	150	
FP0003	FP3	4	4	3	500	22 to 125K	1, 2, 5, 10	150	
FP0004	FP4	5.5	5	4	500	70 to 125K	1, 2, 5, 10	150	
FP0005	FP5	6.5	6	5	600	70 to 125K	1, 2, 5, 10	150	
FP0007	FP7	7.5	-	7	700	25 to 125K	1, 2, 5, 10	150	
FP0010	FP10	-	10	=	700	25 to 125K	1, 2, 5, 10	150	
FP0067	FP67	5	ı	-	500	35 to 19K	1, 2, 5, 10	150	
FP0069	FP69	3	-	2	500	25 to 126K	1, 2, 5, 10	150	

Notes

- (1) Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less.
- (2) Contact factory for values outside these published range.

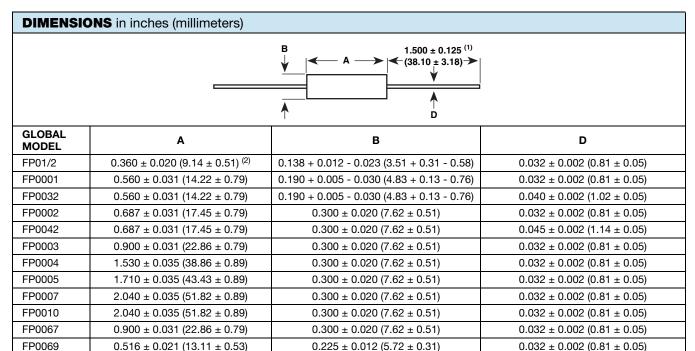
GLOBAL PART NUMBER INFORMATION										
New Global Part Numbering: FP000251K1F9251B8 (preferred part numbering format)										
FP	0 0	0 2	5 1 K	1	F 9 2	5 1 B 8				
GLOBAL MODEL	RESISTANC	E VALUE	TOLERANCE (CODE	SPEC CODES	PACKAGING ⁽³⁾				
(See Standard Electrical Specifications	R = K = K = K = K	Ω Μ Ω	F = ± 1 % G = ± 2 % J = ± 5 %		(See Spec Codes table)	EK = Lead (Pb)-free, strip EL = Lead (Pb)-free, lacer EA = Lead (Pb)-free, T/R				
table)	$10R0 = 10 \Omega$ $1K30 = 1.3 k\Omega$ $1M00 = 1.0 M\Omega$		K = ± 10 %	6		B8 = Tin/lead, strip LB = Tin/lead, lacer CH = Tin/lead, T/R (750 pieces)				
						CJ = Tin/lead, T/R (1000 pieces) G1 = Tin/lead, T/R (600 pieces)				
Historical Part Number: FP2 5112 F B8 (will continue to be accepted)										
FP2		5112		F		B8				
HISTORICAL MO	DEL	RESISTAN	CE VALUE	TOLERANCE CODE		PACKAGING				

Notes

- (3) Some packaging codes are model specific.
- (4) For additional information on packaging, refer to the Through Hole Resistor Packaging document (www.vishay.com/doc?31544).

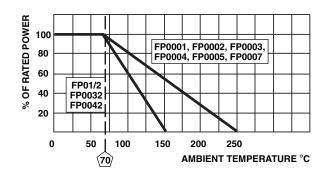


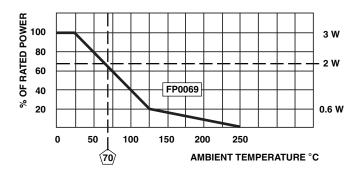
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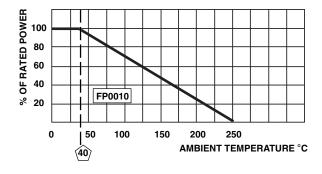


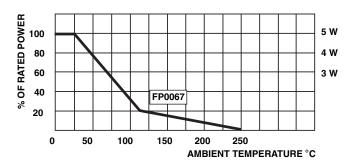
Notes

DERATING









⁽¹⁾ Lead length for product in strip pack. For product supplied in Tape and Reel, the actual lead length would be based on body size, tape spacing and lead trim.

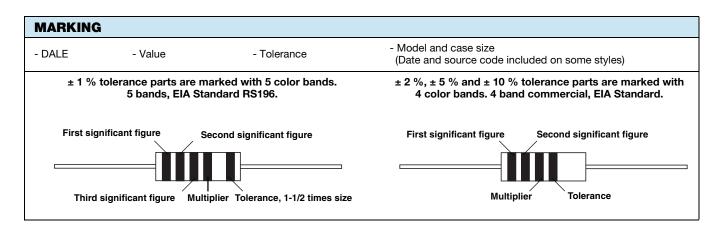
⁽²⁾ Clean lead to clean lead dimensions on FP1/2 are 0.347" (11.10 mm) maximum.





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SPEC CODES								
GLOBAL MODEL	SPEC	RESISTOR TOLERANCE	DESCRIPTION					
FP01/2	5605	1, 2, 5, 10	Color banded, 4 or 5 bands depending on tolerance					
FP01/2	5610	1, 2, 5, 10	Alphanumeric marking					
FP0001	6200	2, 5, 10	Color banded, 4 bands					
FF0001	6201	1	Color banded, 5 bands					
FP0032	6601	1	Color banded, 5 bands					
FF0032	6602	2, 5, 10	Color banded, 4 bands					
FP0002	9251	1, 2, 5, 10	Alphanumeric marking					
FP0042	9201	1	Color banded, 5 bands					
FP0042	9202	2, 5, 10	Color banded, 4 bands					
	9300	1, 2, 5, 10	Alphanumeric marking					
FP0003	9320	2, 5, 10	Color banded, 4 bands					
	9330	1	Color banded, 5 bands					
FP0004	9400	1, 2, 5, 10	Alphanumeric marking					
FP0005	9500	1, 2, 5, 10	Alphanumeric marking					
FP0007	9700	1, 2, 5, 10	Alphanumeric marking					
FP0010	9800	1, 2, 5, 10	Alphanumeric marking					
FP0067	9550	1, 2, 5, 10	Alphanumeric marking					
	7500	1, 2, 5, 10	Alphanumeric marking					
FP0069	7536	2, 5, 10	Color banded, 4 bands					
	7538	1	Color banded, 5 bands					







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PERFORMANCE												
TEST	MAXIMUM ΔR (TYPICAL TEST LOTS) ± %											
1631	FP01/2	FP0001	FP0032	FP0002	FP0042	FP0003	FP0004	FP0005	FP0007	FP0010	FP0067	FP0069
Short Time Overload	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Low Temperature Operation	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25
Moisture Resistance	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shock	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Vibration	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temperature Cycle	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5
Load Life (1000 h Rated Conditions)	1.0	2.0	2.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	3.0
Terminal Strength	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Dielectric Withstanding Voltage	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25
Effect Solder Heat	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25

PACKAGING								
GLOBAL MODEL	PACKAGING TYPE	PACKAGING CODE						
GLOBAL MODEL	PACKAGING TIPE	LEAD (Pb)-BEARING	LEAD (Pb)-FREE					
FD01/0 FD0001 FD0000 FD0000	Strip	B8	EK					
FP01/2, FP0001, FP0032, FP0069	Tape/reel	CJ	EA					
FD0000 FD0000 FD0040 FD0067	Strip	B8	EK					
FP0002, FP0003, FP0042, FP0067	Tape/reel	CH	EA					
FP0004	Lacer	LB	EL					
FF0004	Tape/reel	G1	EA					
FP0005, FP0007, FP0010	Lacer	LB	EL					



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