

# VISHAY/DALE Wirewound/Metal Oxide, Commercial Power Resistors

## CP SERIES - 5 AND 10 WATT

### Features:

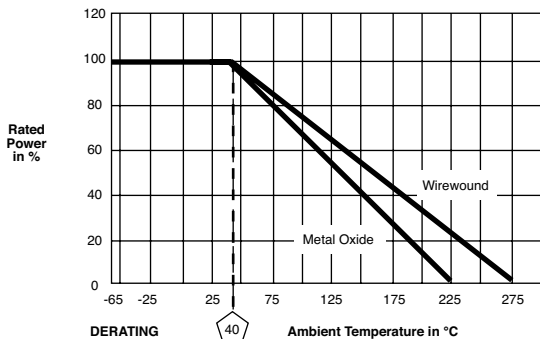
- Wirewound Resistance range 0.1-100Ω
- Metal oxide resistance range 101-50KΩ
- High performance for low cost
- High power to size ratio
- Ceramic cases are available with circuit board stand-offs
- Special inorganic potting compound and ceramic case provide high thermal conductivity in a fireproof package

### Specifications:

- Humidity Performance: 75°C, 90%-100% RH, 240 hours



RoHS Compliant



Global Model	DIMENSIONS: in. (mm)						
	A ±0.031 (.0794)	B ±0.031 (.0794)	C ±0.031 (.0794)	E ±0.001(0.025)		F	
			Wirewound	Metal Oxide	Wirewound ±0.125 (3.175)	Metal Oxide (Min.)	
CP0005	0.875 (22.22)	0.394 (10)	0.354 (9)	0.031 (0.8)	0.031 (0.8)	1.378 (35)	1.378 (35)
CP0010	1.89 (48)	0.394 (10)	0.354 (9)	0.031 (0.8)	0.031 (0.8)	1.378 (35)	1.378 (35)

Standard Electrical Specifications				
Global Model	Power Rating P <sub>40°C</sub> W	Resistance Range (Ω) ±10% Standard, ±5% Available		Weight (Typical) g
		Wirewound	Metal Oxide	
P0005	5	0.1-100	101-50K	4.8
CP0010	10	0.1-100	101-50K	9.5

Technical Specifications		
Parameter	Unit	Characteristic
<b>Wirewound</b>		
Temperature Coefficient	ppm/°C	±400
Short Time Overload	-	5x rated power for 5sec.
Operating Temperature Range	°C	-65/+275
<b>Metal Oxide</b>		
Temperature Coefficient	ppm/°C	±400
Short Time Overload	-	5x rated power for 5sec.
Operating Temperature Range	°C	-65/+275

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Vishay Part No.	Value (Ω)	Tol. (%)	Price Each			
				1	25	50	100
<b>CP5, 5 Watt</b>							
71-CP0005R1000JE14	CP0005R1000JE14	0.1	5	.89	.85	.82	.80
71-CP0005R2200JE14	CP0005R2200JE14	0.22	5	.89	.85	.82	.80
71-CP0005R3300JE14	CP0005R3300JE14	0.33	5	.89	.85	.82	.80
71-CP00054R700JE14	CP00054R700JE14	4.7	5	.71	.69	.67	.65
71-CP00055R000JE14	CP00055R000JE14	5	5	.71	.69	.67	.65
71-CP000510R00JE14	CP000510R00JE14	10	5	.71	.69	.67	.65
71-CP000515R00JE14	CP000515R00JE14	15	5	.71	.69	.67	.65
71-CP000550R00JE14	CP000550R00JE14	50	5	.71	.69	.67	.65
71-CP0005100R0JE14	CP0005100R0JE14	100	5	.71	.69	.67	.65
71-CP0005220R0JE14	CP0005220R0JE14	220	5	.71	.69	.67	.65
71-CP0005470R0JE14	CP0005470R0JE14	470	5	.71	.69	.67	.65
71-CP0005500R0JE14	CP0005500R0JE14	500	5	.71	.69	.67	.65
71-CP00051K000JE14	CP00051K000JE14	1K	5	.34	.33	.30	.27
<b>CP10, 10 Watt</b>							
71-CP0010R2200JE14	CP0010R2200JE14	0.22	5	1.24	1.19	1.15	1.04
71-CP00101R000JE14	CP00101R000JE14	1	5	.96	.93	.90	.875
71-CP00105R000JE14	CP00105R000JE14	5	5	.96	.93	.90	.875
71-CP001010R00JE14	CP001010R00JE14	10	5	.96	.93	.90	.875
71-CP0010500R0JE14	CP0010500R0JE14	500	5	.96	.93	.90	.875

## VISHAY/DALE Industrial Flameproof Metal Film Resistors

### FP SERIES - 1/2, 1 AND 2 WATT

### Features:

- Small physical size
- Low cost
- Can withstand overloads up to 100 times rated power without any trace of flame
- Exceptional frequency characteristics
- Especially suited for circuitry where functions, environments, and duty cycles demand power resistors
- Electroplated tin-lead solder finish leads and tighter tolerances available

### Specifications:

- Temperature Coefficient (ppm/°C): 150



RoHS Compliant

Standard Electrical Specifications						
Global Model	Historical Model	Power Rating			Voltage Rating	Resistance Range (Ω)
		P <sub>25°C</sub> W	P <sub>40°C</sub> W	P <sub>70°C</sub> W		
FP01/2	FP1/2	-	-	0.5	350	10-1M
FP0001	FP1	-	-	1	500	10-1M
FP0002	FP2	3.5	3	2	500	9-1.5M

Global Model	DIMENSIONS: in. (mm)		
	A	B	C
FP01/2	0.360±0.020 (9.14±0.51)	0.138 +0.012/-0.023 (3.51 +0.31/-0.58)	0.032±0.002 (0.81±0.05)
FP0001	0.560±0.031 (14.22±0.79)	0.190 +0.007/-0.015 (4.83 +0.18/-0.38)	0.032±0.002 (0.81±0.05)
FP0002	0.687±0.031 (17.45±0.79)	0.300±0.020 (7.62±0.51)	0.032±0.002 (0.81 ± 0.05)

Spec Codes		
Global Model	SPEC	Description
FP01/2	5605	Color banded, 4 or 5 bands depending on tolerance
FP0001	6200	Color banded, 4 bands
	6201	Color banded, 5 bands
FP0002	9251	Alphanumeric marking

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Vishay Part No.	Value (Ω)	Tol. (%)	Price Each			
				1	25	50	100
<b>FP1/2, 1/2 Watt</b>							
71-FP01210R0G5605EK	FP01210R0G5605EK	10	2	.31	.28	.265	.25
71-FP01247R0G5605EK	FP01247R0G5605EK	47	2	.31	.28	.265	.25
71-FP012270R0G5605EK	FP012270R0G5605EK	270	2	.31	.28	.265	.25
71-FP012470R0G5605EK	FP012470R0G5605EK	470	2	.31	.28	.265	.25
71-FP012560R0G5605EK	FP012560R0G5605EK	560	2	.31	.28	.265	.25
71-FP0121K00G5605EK	FP0121K00G5605EK	1K	2	.31	.28	.265	.25
71-FP01239K0G5605EK	FP01239K0G5605EK	39K	2	.31	.28	.265	.25
71-FP01268K0G5605EK	FP01268K0G5605EK	68K	2	.31	.28	.265	.25
71-FP0121M00G5605EK	FP0121M00G5605EK	1M	2	.31	.28	.265	.25
<b>FP1, 1 Watt</b>							
71-FP0001220RJ6200EK	FP0001220RJ6200EK	220	5	1.50	1.33	1.26	1.20
71-FP0001470RG6200EK	FP0001470RG6200EK	470	2	1.50	1.33	1.26	1.20
71-FP00011K00F6201EK	FP00011K00F6201EK	1K	1	1.50	1.39	1.34	1.27
71-FP00011K50F6201EK	FP00011K50F6201EK	1.5K	1	1.50	1.39	1.34	1.27
71-FP00011K50J6200EK	FP00011K50J6200EK	1.5K	5	1.50	1.33	1.26	1.20
71-FP00013K90G6200EK	FP00013K90G6200EK	3.9K	2	1.50	1.33	1.26	1.20
71-FP000122K0F6201EK	FP000122K0F6201EK	22K	1	1.50	1.39	1.34	1.27
71-FP000147K0G6200EK	FP000147K0G6200EK	47K	2	1.50	1.33	1.26	1.20
71-FP000168K0G6200EK	FP000168K0G6200EK	68K	2	1.50	1.33	1.26	1.20
71-FP0001350KF6201EK	FP0001350KF6201EK	350K	1	1.50	1.39	1.34	1.27
71-FP0001390KG6200EK	FP0001390KG6200EK	390K	2	1.50	1.33	1.26	1.20
<b>FP2, 2 Watt</b>							
71-FP000233R0J9251EK	FP000233R0J9251EK	33	5	2.26	2.11	2.03	1.97
71-FP000256R0J9251EK	FP000256R0J9251EK	56	5	3.70	3.48	2.41	2.05
71-FP00021K00F9251EK	FP00021K00F9251EK	1K	1	7.30	6.84	4.76	4.05
71-FP00028K20F9251EK	FP00028K20F9251EK	8.2K	1	2.30	2.21	2.14	2.08
71-FP000210K0F9251EK	FP000210K0F9251EK	10K	1	2.30	2.21	2.14	2.08
71-FP000215K0J9251EK	FP000215K0J9251EK	15K	5	2.26	2.11	2.03	1.97
71-FP0002100KF9251EK	FP0002100KF9251EK	100K	1	2.30	2.21	2.14	2.08