

# VISHAY/DALE Metal Film Resistors

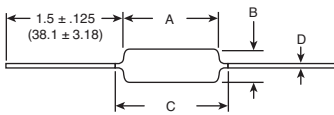
## VISHAY/DALE TYPE PTF SERIES - .1% METAL FILM RESISTORS, PRECISION, ULTRA-HIGH STABILITY

For quantities greater than listed, call for quote.

**Features:**

- Extremely low temperature coefficient of resistance
- Very low noise and voltage coefficient
- Very good high frequency characteristics
- Can replace wirewound bobbins
- Proprietary epoxy coating provides superior moisture protection

**DIMENSIONS: in. (mm)**



Model	A	B	C	D
PTF56	0.250±0.031 (3.81±0.51)	0.091±0.009 (2.31±0.23)	0.300 (7.62)	0.025 (0.64)
PTF65	0.375±0.062 (9.53±1.57)	0.145±0.016 (3.68±0.41)	0.475 (12.07)	0.025 (0.64)

For quantities greater than listed, call for quote.

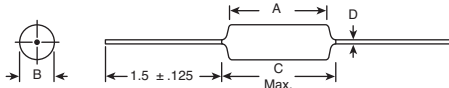
MOUSER STOCK NO.	Vishay Part No.	Value	TCR (ppm/°C)	Tol. ± %	Price Each			
					1	25	50	100
<b>PTF56, 1/8 Watt @ 85°C - Limiting Element Voltage Max. 300</b>								
71-PTF5649R900BYBF	PTF5649R900BYBF	49.9	10	0.10	1.76	1.66	1.60	1.56
71-PTF5650R000BYBF	PTF5650R000BYBF	50	10	0.10	1.76	1.66	1.60	1.56
71-PTF56100R00BZBF	PTF56100R00BZBF	100	15	0.10	2.16	1.97	1.75	1.66
71-PTF56100R00BYBF	PTF56100R00BYBF	100	10	0.10	1.76	1.66	1.60	1.56
71-PTF56200R00AYBF	PTF56200R00AYBF	200	10	0.05	2.54	2.30	2.18	2.09
71-PTF56200R00BYBF	PTF56200R00BYBF	200	10	0.10	1.76	1.66	1.60	1.56
71-PTF56250R00BYBF	PTF56250R00BYBF	250	10	0.10	1.76	1.66	1.60	1.56
71-PTF56500R00BYBF	PTF56500R00BYBF	500	10	0.10	2.26	2.06	1.83	1.74
71-PTF561K0000BYBF	PTF561K0000BYBF	1K	10	0.10	2.26	2.06	1.83	1.74
71-PTF561K0000BZBF	PTF561K0000BZBF	1K	5	0.10	2.92	2.49	2.15	1.94
71-PTF562K0000BYBF	PTF562K0000BYBF	2K	10	0.10	1.23	1.12	1.00	.948
71-PTF563K0000BYBF	PTF563K0000BYBF	3K	10	0.10	1.12	.99	.91	.87
71-PTF563K8800BZBF	PTF563K8800BZBF	3.88K	5	0.10	1.96	1.79	1.59	1.51
71-PTF564K9900BYBF	PTF564K9900BYBF	4.99K	10	0.10	1.12	.99	.91	.87

MOUSER STOCK NO.	Vishay Part No.	Value	TCR (ppm/°C)	Tol. ± %	Price Each			
					1	25	50	100
<b>PTF56, 1/8 Watt @ 85°C - Limiting Element Voltage Max. 300 (Cont.)</b>								
71-PTF565K0000BYBF	PTF565K0000BYBF	5K	10	0.10	1.12	.99	.91	.87
71-PTF565K0000BZBF	PTF565K0000BZBF	5K	5	0.10	1.56	1.47	1.41	1.38
71-PTF567K5000BYBF	PTF567K5000BYBF	7.5K	10	0.10	1.12	.99	.91	.87
71-PTF5610K000BZBF	PTF5610K000BZBF	10K	15	0.10	1.20	1.09	.972	.923
71-PTF5610K000BYBF	PTF5610K000BYBF	10K	10	0.10	.61	.58	.53	.49
71-PTF5610K000BZBF	PTF5610K000BZBF	10K	5	0.10	1.56	1.47	1.41	1.38
71-PTF5611K000BYBF	PTF5611K000BYBF	11K	10	0.10	1.23	1.12	1.00	.948
71-PTF5615K000BYBF	PTF5615K000BYBF	15K	10	0.10	1.23	1.12	1.00	.948
71-PTF5620K000BYBF	PTF5620K000BYBF	20K	10	0.10	.61	.58	.53	.49
71-PTF5620K000BZBF	PTF5620K000BZBF	20K	5	0.10	1.56	1.47	1.41	1.38
71-PTF5624K900BYBF	PTF5624K900BYBF	24.9K	10	0.10	1.23	1.12	1.00	.948
71-PTF5650K000BZBF	PTF5650K000BZBF	50K	5	0.10	1.56	1.47	1.41	1.38
71-PTF56100K00BYBF	PTF56100K00BYBF	100K	10	0.10	1.12	.99	.91	.87
71-PTF56100K00BZBF	PTF56100K00BZBF	100K	5	0.10	1.56	1.47	1.41	1.38
71-PTF56200K00BZBF	PTF56200K00BZBF	200K	5	0.10	2.35	2.25	2.14	2.03
71-PTF56249K00BYBF	PTF56249K00BYBF	249K	10	0.10	2.80	2.55	2.27	2.15
71-PTF56249K00BZBF	PTF56249K00BZBF	249K	5	0.10	4.21	3.51	3.33	2.77
71-PTF56300K00BZBF	PTF56300K00BZBF	300K	5	0.10	4.21	3.51	3.33	2.77
71-PTF56499K00BZBF	PTF56499K00BZBF	499K	5	0.10	4.21	3.51	3.33	2.77
<b>PTF65, 1/4 Watt @ 85°C - Limiting Element Voltage Max. 500</b>								
71-PTF6550R000BYBF	PTF6550R000BYBF	50	10	0.10	1.67	1.57	1.52	1.49
71-PTF65100R00BYBF	PTF65100R00BYBF	100	10	0.10	2.16	1.97	1.75	1.66
71-PTF65120R00BYBF	PTF65120R00BYBF	120	10	0.10	1.67	1.57	1.52	1.49
71-PTF65250R00AYBF	PTF65250R00AYBF	250	10	0.05	1.80	1.54	1.50	1.45
71-PTF65400R00AZBF	PTF65400R00AZBF	400	5	0.05	3.77	3.54	3.07	2.92
71-PTF651K0000BYBF	PTF651K0000BYBF	1K	10	0.10	2.16	1.97	1.75	1.66
71-PTF651K0000BZBF	PTF651K0000BZBF	1K	5	0.10	2.20	2.00	1.78	1.69
71-PTF65100K00BYBF	PTF65100K00BYBF	100K	10	0.10	1.67	1.57	1.52	1.49
71-PTF651M0000BYBF	PTF651M0000BYBF	1M	10	0.10	1.46	1.37	1.19	1.13
71-PTF651M0000BZBF	PTF651M0000BZBF	1M	15	0.10	1.78	1.67	1.60	1.56

## VISHAY/DALE TYPE RN SERIES - 1% METAL FILM RESISTORS - 1/8, 1/4 AND 1/2 WATT

**Features:**

- Very low noise
- Very low voltage coefficient
- Excellent high frequency characteristics
- Meets MIL-R-10509
- Flame retardant epoxy coating



Series	DIMENSIONS: in.			
	A	B	C	D
RN55D	.240±.020	.090±.008	.278	.025±.002
RN55D	.334±.031	.145±.015	.425	.025±.002
RN55D	.562±.031	.180±.015	.687	.025±.002

**RN55D, 1/8W**

MOUSER STOCK NO.	Range of Values (Ω)	Price Each				
		1	50	100	500	1000
71-RN55D-F-Value	10-1M	.07	.053	.05	.044	Call

**RN60D, 1/4W**

MOUSER STOCK NO.	Range of Values (Ω)	1	50	100	500	1000
71-RN60D-F-Value	10-1M	.07	.059	.056	.049	Call

**RN65D, 1/2W**

MOUSER STOCK NO.	Range of Values (Ω)	1	50	100	500	1000
71-RN65D-F-Value	10-1.0M	.22	.21	.207	.181	Call

For additional values call your Mouser representative or buy on-line at mouser.com

TABLE OF STOCKED VALUES											
RN55D-F 1/8 Watt				RN60D-F 1/4 Watt				RN65D-F 1/2 Watt			
10	243	909	4.75K	15K	249K	10	750	15K	10	6.81K	221K
15	249	1K	4.99K	18.2K	301K	20	825	20K	100	10K	301K
20	267	1.21K	5.11K	20K	475K	24.9	1K	22.1K	200	15K	475K
22.1	274	1.5K	5.62K	22.1K	499K	49.9	1.1K	33.2K	221	20K	499K
27.4	301	1.82K	6.04K	27.4K	1M	75	1.21K	49.9K	332	22.1K	1M
33.2	332	2K	6.19K	30.1K		100	1.5K	100K	475	33.2K	
47.5	392	2.21K	6.81K	33.2K		121	1.82K	150K	681	39.2K	
49.9	402	2.37K	7.5K	47.5K		150	2K	200K	825	47.5K	
56.2	432	2.49K	8.06K	49.9K		200	2.21K	221K	1K	49.9K	
75	475	2.74K	8.25K	51.1K		221	2.74K	499K	1.5K	56.2K	
90.9	499	3.01K	9.09K	75K		243	3.01K	1M	1.82K	68.1K	
100	511	3.32K	10K	80.6K		249	4.99K		2.21K	100K	
150	562	3.65K	11K	82.5K		301	5.62K		3.32K	110K	
182	681	3.92K	12.5K	100K		332	6.81K		4.75K	121K	
200	750	4.02K	13K	150K		475	10K		4.99K	150K	
221	825	4.32K	13.3K	200K		499	12.1K		5.62K	182K	

## VISHAY/DALE METAL FILM RESISTORS - 1/4, 1/2, 3/4 AND 1 WATT ±1% TOLERANCE

**Type CCF55, CCF60 Series**

**Features:**

- ±100PPM/°C temperature coefficient
- Superior electrical performance
- Flame retardant epoxy conformal coating
- Standard 5 band color code marking for ease of identification after mounting
- Tape and reel packaging

**Specifications:**

- Power Rating: CCF55=1/4 and 1/2 watt CCF60=1/2, 3/4 and 1 watt
- Insulation Resistance: 10,000MΩ
- Operating Temperature: -65°C to +165°C

For quantities greater than listed, call for quote.

Model	DIMENSIONS: in.				
	A	B	C	D	E
CCF-55	.240±.020	.090±.008	.265	.025±.002	1.100±.040
CCF-60	.334±.031	.139±.009	.400	.025±.002	1.000±.040

MOUSER STOCK NO.	Range of Values (Ω)	Price Each				
		1	100	1000	2000	5000
71-CCF55-Value	10-2.49M	.09	.045	.034	.03	.028
71-CCF60-Value	10-1M	.10	.075	.06	.05	.04

TABLE OF STOCKED VALUES																	
10	75	340	866	2.49K	7.5K	20K	75K	274K	15	82.5	392	1K	2.8K	7.68K	22.1K	82.5K	301K
16.2	100	402	1.07K	3.16K	8.25K	27.4K	90.9K	332K	20	105	422	1.1K	3.32K	8.45K	30.1K	100K	392K
22.1	120	432	1.21K	4.32K	8.87K	33.2K	110K	475K	24.9	121	475	1.3K	4.53K	10K	39.2K	121K	499K
27.4	150	499	1.33K	4.75K	10.2K	40.2K	133K	1M	27.4	150	499	1.33K	4.75K	10.2K	40.2K	133K	1M
30.1	200	510	1.5K	4.99K	11K	47.5K	137K	1.5M	30.1	200	510	1.5K	4.99K	11K	47.5K	137K	1.5M
39.2	220	562	1.62K	5.11K	12.1K	49.9K	150K	2M	39.2	220	562	1.62K	5.11K	12.1K	49.9K	150K	2M
47.5	221	604	1.82K	5.62K	13K	51.1K	162K	2.21M	47.5	221	604	1.82K	5.62K	13K	51.1K	162K	2.21M
49.9	243	619	2K	6.04K	14K	56.2K	200K	2.49M	49.9	243	619	2K	6.04K	14K	56.2K	200K	2.49M
51.1	249	681	2.15K	6.19K	15K	68.1K	221K		51.1	249	681	2.15K	6.19K	15K	68.1K	221K	
60.4	301	750	2.21K	6.81K	16.2K	68.1K	249K		60.4	301	750	2.21K	6.81K	16.2K	68.1K	249K	
73.2	332	825	2.43K														