

# PF1262 Series

TO-126 Power Thin Film Resistors



- TO-126 Housing
- Resistances from 0.01 to 51K Ohms
- Rated Power to 20 Watts
- Resistance Tolerances to  $\pm 1\%$
- TCR to  $\pm 50\text{ppm}/^\circ\text{C}$
- Low Inductance (  $< 50\text{nH}$  )
- Excellent Pulse Handling
- Isolated Back Plate

## SPECIFICATIONS

Type	Power Rating		Thermal Resistance	Resistance Range <sup>3</sup>		Tolerances	Temperature Coefficients
	Heatsink <sup>1</sup>	Free Air <sup>2</sup>		Min	Max		
<b>PF1262</b>	20W	1W	5.9 K/W	0.01 $\Omega$	51K $\Omega$	$\pm 1\%$ ( $R \geq 0.1\Omega$ ) $\pm 5\%$	$\pm 50\text{ppm}/^\circ\text{C}$ ( $R \geq 10\Omega$ ) $\pm 100\text{ppm}/^\circ\text{C}$ ( $0.1\Omega \leq R < 10\Omega$ ) $\pm 250\text{ppm}/^\circ\text{C}$ ( $R < 0.1\Omega$ )

<sup>1</sup> Power rating based on 25°C Flange Temperature

<sup>2</sup> Power rating based on 25°C Ambient Temperature

<sup>3</sup> Consult Factory for Higher or Lower Values

Specification	Value	
Maximum Current	25A	
Temperature Range	-55°C to +175°C	
Inductance	8.2 nH	
Dielectric Strength	2000 VAC	
Max. Operating Voltage	500 V	
Insulation Resistance	>1000 Meg-Ohm	
Terminal Finish	Tin Plated Copper	
Flammability	UL94-V0	
Weight	0.9 grams	
Environmental Performance	$\Delta R$	Test Conditions
Load Life	$\pm 1\% + 0.05\Omega$	25°C / 90 min ON / 30 min OFF / 1000 hr
Humidity Resistance	$\pm 1\% + 0.05\Omega$	40°C / 90-95% RH / DC 0.1W / 1000 hr
Temperature Cycle	$\pm 0.25\% + 0.05\Omega$	-55°C for 30 min / +155°C for 30 min / 1000 hr
Solder Heat	$\pm 0.1\% + 0.05\Omega$	+350°C / 3s
Vibration	$\pm 0.25\% + 0.05\Omega$	IEC60068-2-6

## Ordering Information

Part Description: Part Type - Resistance - Tolerance

Example: PF1262 0.5 Ohm 1%

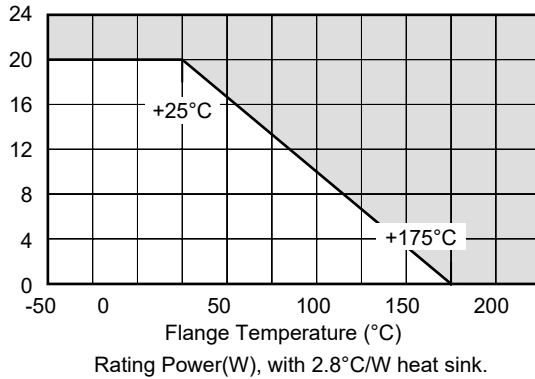
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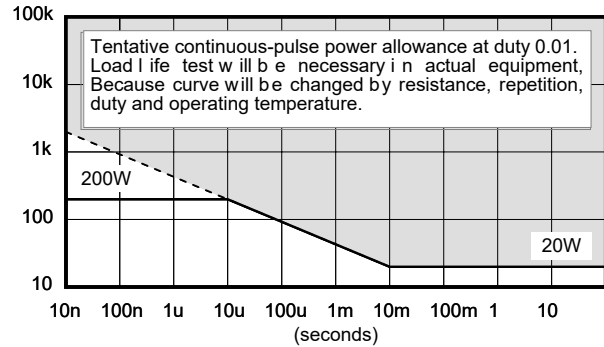


## SPECIFICATIONS (continued)

Derating Curve



Pulse Peak Power



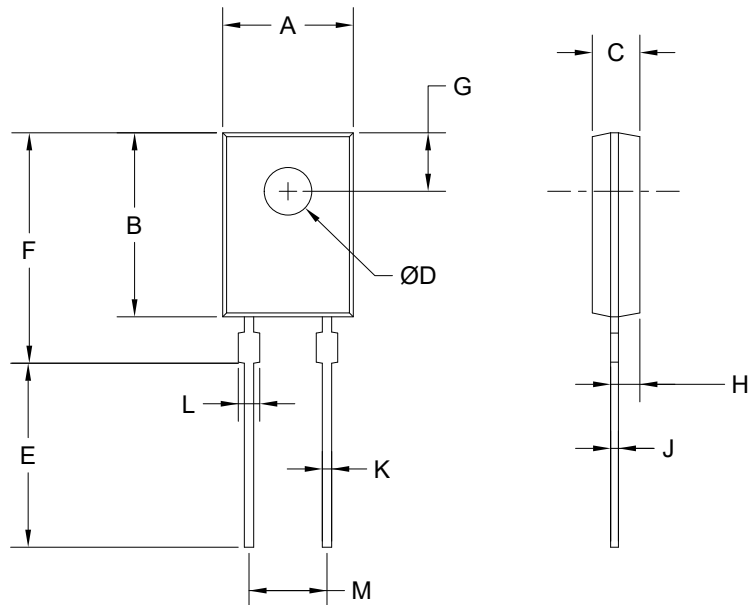
### Power Rating Notes -

The PF1260 Series Thin Film Resistors must be attached to a suitable heatsink. The maximum internal resistor temperature is 155°C.

To specify an appropriate heatsink use the following formula :

$$R_{\theta H} = \frac{T_{MAX} - (P * R_{\theta R}) - T_A}{P}$$

Where:  $R_{\theta H}$  = Thermal Resistance of Heatsink ( K/W )  
 $R_{\theta R}$  = Thermal Resistance of Resistor ( K/W )  
 $T_{MAX}$  = Maximum Temperature of Resistor  
 $T_A$  = Ambient Temperature of Heatsink ( °C )  
 $P$  = Power Through Resistor ( W )



### Mounting Notes -

The PF1260 Series Thin Film Resistors must be attached to a suitable heatsink. Mount resistor using thermal grease to a clean / flat surface. Use a compression washer to provide 150 to 300 pounds ( 665 to 1330N ) of mounting force. Torque mounting screw to 8 in-lbs ( 0.9 Nm ).

Back plate is isolated from both pins.

	mm	tol. ± mm	inches	tol. ± inches
A	8.5	0.2	0.33	0.008
B	12.0	0.2	0.47	0.008
C	3.1	0.2	0.12	0.008
D	3.1	0.1	0.12	0.004
E	13.8	1.0	0.54	0.040
F	15.2	0.5	0.60	0.020
G	3.8	0.2	0.15	0.008
H	1.75	0.1	0.07	0.004
J	0.5	0.05	0.02	0.002
K	0.6	0.05	0.02	0.002
L	1.4	0.05	0.06	0.002
M	5.08	0.1	0.20	0.004