

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 ($< 50\text{nH}$)
- Isolated Back Plate

SPECIFICATIONS

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

¹ Power rating based on 25°C Flange Temperature

² Power rating based on 25°C Ambient Temperature

³ Consult Factory for Higher or Lower Values

Specification	Value	
Maximum Current	25A	
Temperature Range	-55°C to $+155^\circ\text{C}$	
Inductance	8.2 nH	
Dielectric Strength	2000 VAC	
Max. Operating Voltage	500 V	
Insulation Resistance	> 1000 Meg-Ohm	
Environmental Performance	ΔR	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 / $+155^\circ\text{C}$ for 30 min / 1000 hr
Solder Heat	$\pm 0.1\% + 0.05\Omega$	$+350^\circ\text{C}$ / 3s

Ordering Information

Part Description: Part Type - Resistance - Tolerance

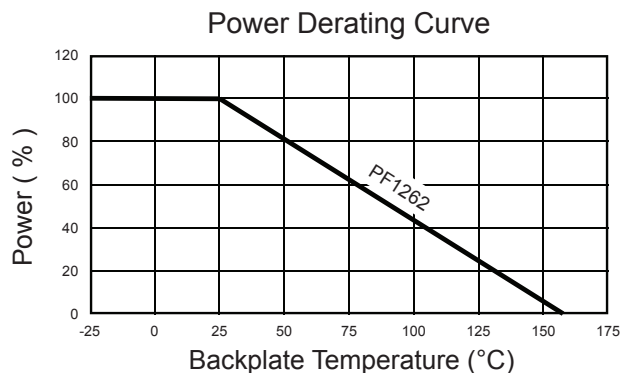
Example: PF1262 0.5 Ohm 1%

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SPECIFICATIONS (continued)



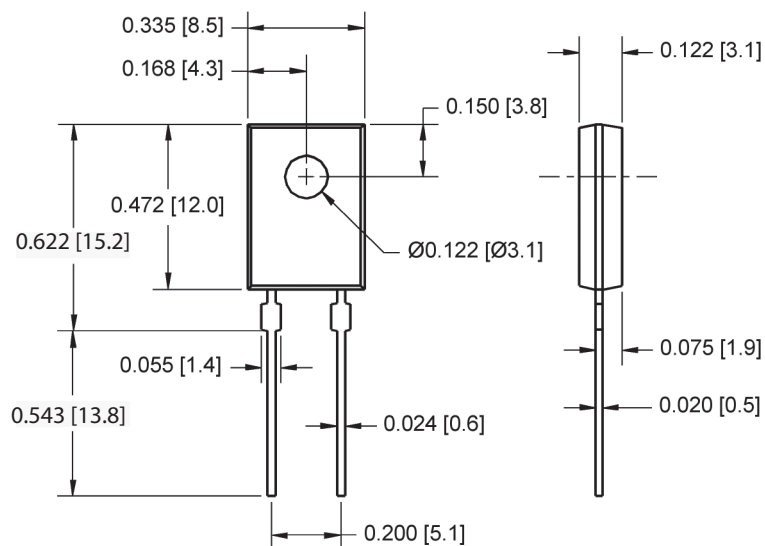
Power Rating Notes -

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 :

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

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.