

PF1262 Series

TO-126 Power Thin Film Resistors



- TO-126 Housing
- Resistances from 0.02 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 ³		Tolerances	Temperature Coefficients
	Heatsink ¹	Free Air ²		Min	Max		
PF1262	20W	1W	5.9 C/W	0.02 Ω	51K Ω	$\pm 1\%$ ($R \geq 10\Omega$) $\pm 5\%$	$\pm 50\text{ppm}/^\circ\text{C}$ ($R \geq 10\Omega$) $\pm 100\text{ppm}/^\circ\text{C}$ ($0.1\Omega \leq R < 10\Omega$) $\pm 250\text{ppm}/^\circ\text{C}$ ($R < 0.1\Omega$)

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°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	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°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

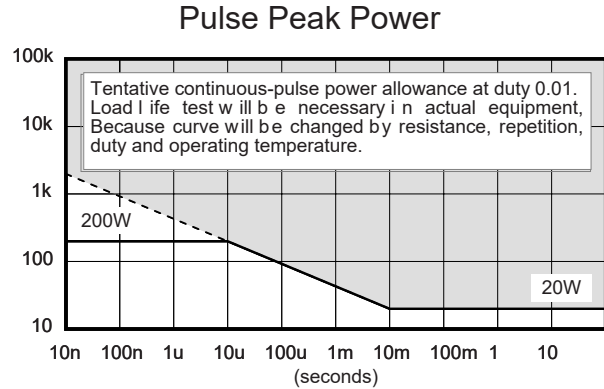
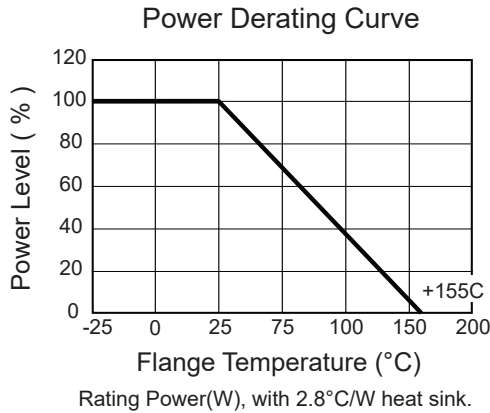
Example: PF1262 0.5 Ohm 1%

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SPECIFICATIONS (continued)



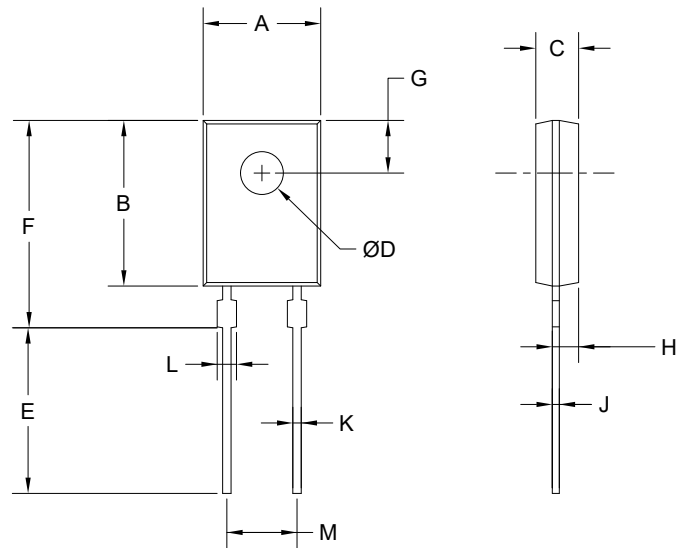
Power Rating Notes -

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 (C/W)
 $R_{\theta R}$ = Thermal Resistance of Resistor (C/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	12.0	1.0	0.54	0.040
F	15.0	0.5	0.60	0.020
G	3.8	0.2	0.15	0.008
H	1.9	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	5.1	0.1	0.20	0.004