

Medium-High Power Fan Cooled Thermal Sensors

F100A-PF-DIF-18

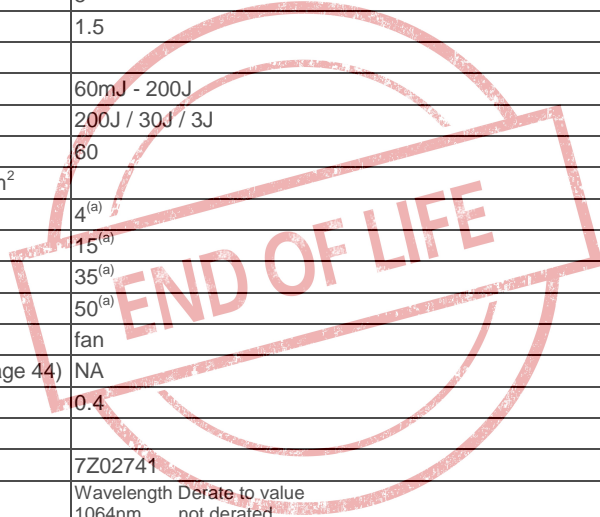
50mW to 100W

Features

- General purpose and high damage threshold
- Fan cooled
- Powers to 100W
- $\phi 17.5$ mm aperture



Model	F100A-PF-DIF-18												
Use	Short pulse lasers												
Absorber Type	PF type + diffuser												
Spectral Range μm	0.24 – 2.2												
Aperture mm	$\phi 17.5$ mm												
Power Mode													
Power Range ^(b)	50mW - 100W												
Power Scales	100W / 30W /3W												
Power Noise Level ^(b)	6mW												
Maximum Average Power Density KW/cm ²	0.5												
Response Time with Display (0-95%) typ. s	2												
Power Accuracy +/-%	5												
Linearity with Power +/-%	1.5												
Energy Mode													
Energy Range	60mJ - 200J												
Energy Scales	200J / 30J / 3J												
Minimum Energy mJ ^(b)	60												
Maximum Energy Density J/cm ²													
<100ns	4 ^(a)												
0.5ms	15 ^(a)												
2ms	35 ^(a)												
10ms	50 ^(a)												
Cooling	fan												
Fiber Adapters Available (see page 44)	NA												
Weight Kg	0.4												
Version													
Part Number: Standard Sensor	7Z02741												
Notes: (a) For shorter wavelengths derate maximum energy density as follows:	<table border="0"> <tr> <td>Wavelength</td> <td>Derate to value</td> </tr> <tr> <td>1064nm</td> <td>not derated</td> </tr> <tr> <td>532nm</td> <td>80% of stated value</td> </tr> <tr> <td>355nm</td> <td>60% of stated value</td> </tr> <tr> <td>266nm</td> <td>40% of stated value</td> </tr> <tr> <td>193nm</td> <td>NA</td> </tr> </table>	Wavelength	Derate to value	1064nm	not derated	532nm	80% of stated value	355nm	60% of stated value	266nm	40% of stated value	193nm	NA
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Notes: (b) For lower powers up to 30W it is recommended to work with the fan off and then the noise level is ~3 times lower. It is also recommended to measure energy with the fan off.													



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