## **Pyroelectric Energy Sensors**

## 2µJ to 100µJ

## Features

- \u00e912mm apertures
- Repetition rates up to 4,000Hz
- Sensitive sensors
- Pulse widths up to 500µs



PE10 / PE10BB

Model	PE10	PE10BB
Use	Sensitive	Flat spectral response
Aperture mm	φ12	φ12
Absorber Type	metallic	broadband
Spectral Range µm <sup>(a)</sup>	0.15 - 12	0.15 – 20
Surface Reflectivity % approx.	50	5
Calibration Accuracy +/-% (a)	3	3
Energy Scales	10mJ to 20µJ	10mJ to 100µJ
Lowest Measurable Energy µJ	2	10
Max Pulse Width µs	20	500
Maximum Pulse Rate pps	4000	150
Noise on Lowest Range µJ	0.1	2.5
Additional Error with Frequency %	±1.5% to 3KHz, ±3% to 4KHz	±1.5% to 150Hz
Damage Threshold J/cm <sup>2</sup>		
<100ns	0.1	0.3
1µs	0.2	0.3
300µs	3	
Linearity with Energy for >10% of full scale	±2%	±2%
Maximum Average Power W 🥖	2	2
Maximum Average Power Density W/cm <sup>2</sup>	50	50
Fiber Adapters Available	ST, FC, SMA, SC	ST, FC, S <mark>M</mark> A, SC
Weight Kg	0.25	0.25
Version	V2	V2
Part Number	7Z02862	7Z02 <mark>8</mark> 71
Notes: (a) Calibrated curve is checked and adjusted at the following wavelengths (µm)	0.193, 1.064	1.064
For other wavelengths in the curve there is additional calibration error as stated.	240 – 800nm add ±4%, 2-3μm add ±8%, 10.6μm add ±15%	0.2-3µm ±2%, 10.6µm ±5%



