

## 1.1.2.3 Low Power Thermal Sensors

### 1.1.2.3.2 Beam Trap

Up to 50W

#### Features

- Does not measure power, traps beam only
- Power capacity up to 50W
- Backscattered power 0.05%
- Pulsed damage threshold 4J/cm<sup>2</sup>
- Average power density up to 16kW/cm<sup>2</sup>
- Ø15mm aperture



The BT50A-15 absorbs a laser beam that is inserted into the entrance aperture parallel to the unit's optic axis. The beam trap is designed that only a very small fraction of the light is backscattered. The BT50A-15 does not measure power. It is a beam trap only.

When operated at full power, the BT50A-15 can heat up to over 100degC. Note that the absorbing element of the beam trap is graphite which may not be suitable for some environments.

Model	BT50A-15	
Use	Beam trap for CW and pulsed lasers up to 50W average power	
Absorber Type	Broadband graphite absorber	
Spectral Range $\mu\text{m}$	0.19 - 20	
Backscatter	0.05% or less, typical	
Aperture mm	Ø15mm	
Maximum Acceptance Angle	$\pm 10$ degrees	
Maximum Incident Power	50W	
Maximum Average Power Density	16kW/cm <sup>2</sup>	
Maximum Energy Density	<100ns pulses	4J/cm <sup>2</sup>
	2ms pulses	100J/cm <sup>2</sup>
Cooling	convection	
Dimensions	See drawing below	
Weight kg	0.9	
Compliance	RoHS, China RoHS	
Version		
Part number	7Z17204	

#### BT50A-15

