

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/cm²
- Average power density up to 16kW/cm²
- 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 μm | 0.19 - 20 | |
| Backscatter | 0.05% or less, typical | |
| Aperture mm | Ø15mm | |
| Maximum Acceptance Angle | ± 10 degrees | |
| Maximum Incident Power | 50W | |
| Maximum Average Power Density | 16kW/cm ² | |
| Maximum Energy Density | <100ns pulses | 4J/cm ² |
| | 2ms pulses | 100J/cm ² |
| Cooling | convection | |
| Dimensions | See drawing below | |
| Weight kg | 0.9 | |
| Compliance | RoHS, China RoHS | |
| Version | | |
| Part number | 7Z17204 | |

BT50A-15

