

SSE-200 Fiber Bragg Grating Temperature Sensor

Aniber's SSE-200 Fiber Bragg Grating (FBG) based temperature sensor is designed for high precision temperature measurement with an accuracy of better than 0.1 °C*. Daisy-chain connection of several sensors for multi-point sensing is possible when employing FBG-based sensor and hence complicated wiring can be avoided. We offer three packaging formats designed for various installation environments, wavelengths of 850nm and 1550nm region with standard operational measurement range of -60 – 100 °C are available.

* Depends on interrogator wavelength measurement accuracy

SPECIFICATIONS

PERFORMANCE PROPERTIES			
Operation Wavelength	815 – 875 nm	1510 – 1590 nm	
Measurement Range	-60 °C – 100 °C		
Resolution	0.05 °C		
Operation Temperature	-60 °C – 100 °C		
Sensitivity ¹	5.5 (15) pm/°C typ.	10 (28) pm/°C typ.	
PHYSICAL PROPERTIES			
Sensor Format	Block	Tube	Plate
Dimension	50 x 20 x 5.8 mm	Φ10 x 46 mm	15 x 30 x 1.6 mm
Weight	25 gram	12 gram	3 gram
Material	Stainless Steel		
Fastening Method	Spot Weld / Epoxy	Direct Buried	Epoxy
OPTICAL PROPERTIES			
FBG Peak Reflectivity	>70 %		
FBG FWHM (-3 dB)	0.25 nm (+/- 0.05 nm)		
FBG Isolation ²	>15 dB (+/- 0.4 nm around center wavelength)_		
Optical Fiber Type	HI780 compatible	SMF-28e compatible	
Cable Length	1 m (other on request)		
Cable Type	4 mm HDPE outdoor cable / 1mm fiberglass braid		
Optical Connector	2 x FC/APC (others on request)		

1 Value In bracket denotes the high sensitivity type temperature sensor

2 At +/- 0.4 nm of center wavelength.

Key Features

- Three Packaging Formats
- Wide Operational Temperature Range
- Custom Measurement Range Available

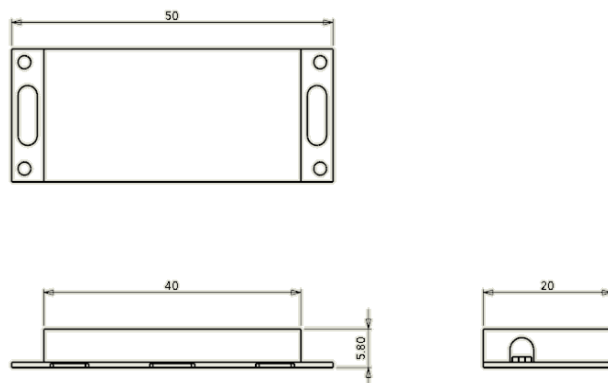
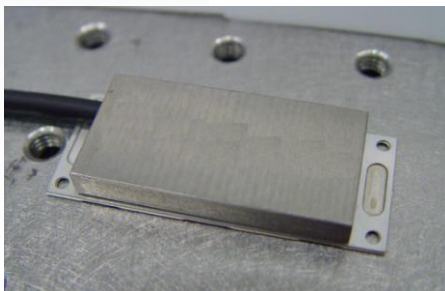
Other Sensors for

- Displacement
- Temperature
- Vibration
- Acceleration
- Strain

Measurement are Available.

PLEASE CONTACT US FOR MORE INFORMATION!

DIMENSIONS- BLOCK FORMAT

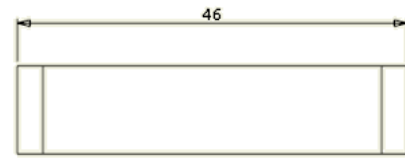
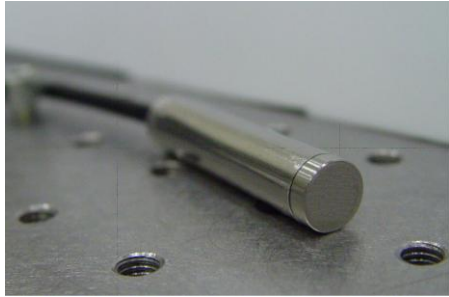


Specifications are subjected to change with a view of enhancing system performance without prior notice.
Design and specifications can be customized to suit a range of customer requirements.

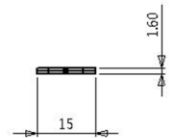
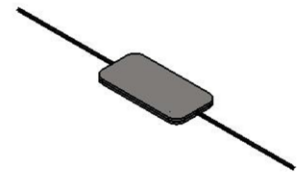
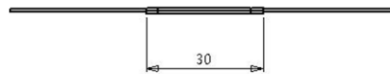
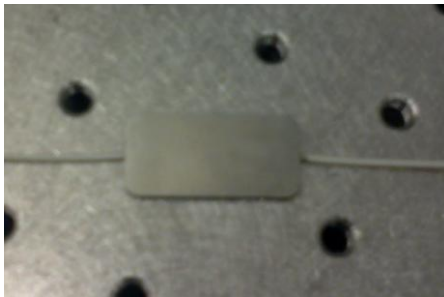


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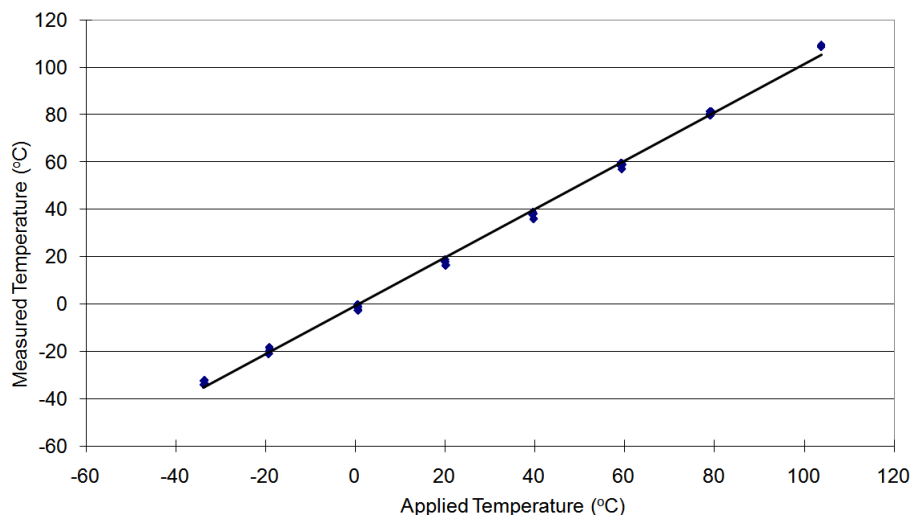
DIMENSIONS- TUBE FORMAT



DIMENSIONS- PLATE FORMAT



TYPICAL PERFORMANCE (1550 FBG)



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