

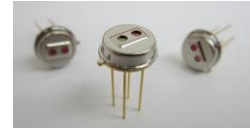
NDIR SENSOR

OGS-335 SF6

NDIR SF6 Dual Channels Gas Sensor

OGS-335 SF6

Revision Date: 2016/08/25 (Draft.01)



Introduction

The OGS-335 SF6 is a dual channels thermopile device having an output signal voltage directly proportional to the incident infrared (IR) radiation power. Two infrared narrow band pass filters in front of the sensor provide SF₆ gas absorption signal and reference signal simultaneously.

Features

- Thermistor temperature reference included
- High sensitivity
- Fast response time
- Narrow band pass filters

Applications

- Power Utility Monitoring
- Circuit breaker leak testing and Maintenance
- Area monitoring in substations
- Fast, accurate, quantitative leak testing of gas insulated switch gear (GIS) for routine quality control or during field commissioning

Specifications

Model	OGS-335 SF6		
Target Gas	SF ₆		
Filter CWLs	10.6 um (TP2) 8.26 um (TP1)		
Window Size	1.5 mm in diameter		
Spacing of Window	2.5 mm		
Package Type	TO-5		
Parameter	Typical	Unit	Conditions
Sensitivity	61	V/W	323K, w/o filter
TC of sensitivity	0.06	%/K	25°C
Thermopile Voltage	3.7±1.1	mV	Tb:50°C, Ta:25°C w/o filter
Sensitive area	1.3x1.3	mm ²	
Resistance of thermopile	135±35	KΩ	25°C
TC of resistance	0.02	%/K	25°C
Time constant	30	ms	
Noise voltage	46	nV/Hz ^{1/2}	r.m.s. 300K
Noise Equivalent Power	0.76	nW/Hz ^{1/2}	323K, w/o filter
Normalized detectivity (D*)	1.7x10 ⁸	cm*Hz ^{1/2} /w	323K, w/o filter
Thermistor	Typical	Unit	Conditions
Resistance	100±5%	KΩ	25°C
β value	3964±0.5%	K	25°C/100°C

