

# DTPG700F01

Silicon-Based Thermopile IR Sensor

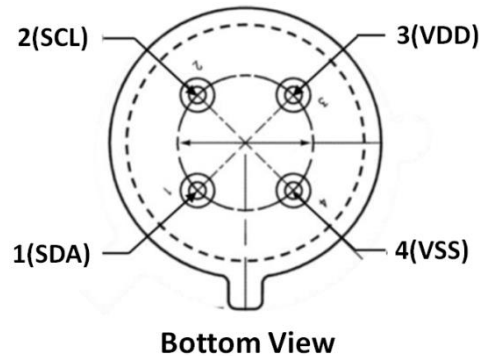
The DTPG700F01 is a dual-channel TO-5 thermopile used in NDIR CO<sub>2</sub> sensing. Two narrow band filters centered at 4.26 $\mu$ m and 3.95 $\mu$ m provides CO<sub>2</sub> gas absorption signal and reference signal, respectively. One thermistor inside the package provides ambient temperature reference. MCU included in the TO-package to provide digital output for direct back-end applications.

## Feature:

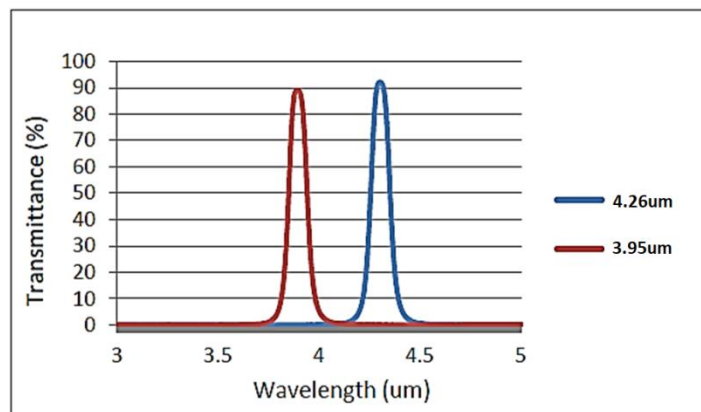
- TO-5 metal package
- Provide digital outputs
- Pre-calibrated
- Thermistor temperature reference included
- Used for CO<sub>2</sub> concentration measurement

## Pin Definition:

Pin No.	Pin Description
1	SDA
2	SCL
3	VDD
4	VSS



## Optical Characteristics:

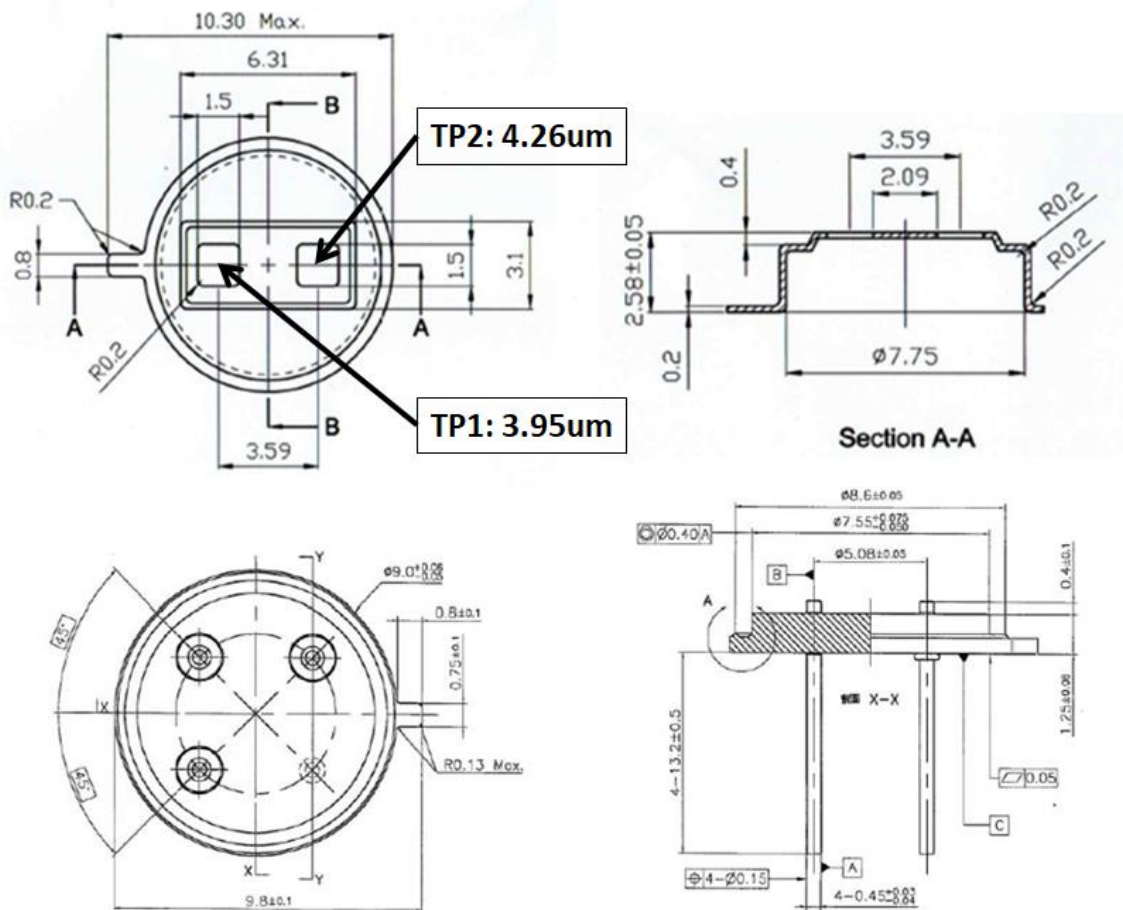


Transmittance of 3.95 $\mu$ m filter and 4.26 $\mu$ m filter

## Technical Specifications

Parameter	Symbol	Value	Unit	Conditions
Supply Voltage		3~5.5	V	
Serial Data Clock I2C	F <sub>SCL</sub>	50~400	KHz	
ADC Resolution		20	Bit	
Reading Resolution		0.1	°C	
Object Temperature		-20~100	°C	
Operating Temperature		-20~85	°C	
Storage Temperature		-40~100	°C	
Field of View	FOV	90	deg.	@50% target signal

## Package Outline:



## Standard Product Packing Form

Stick Magazine – 50pcs per stick magazine