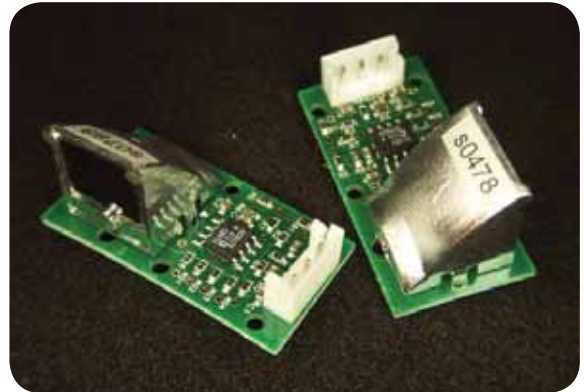


T H E R M O M E T R I C S  
A C O M M I T M E N T T O E X C E L L E N C E

# ZTP-115M

## Thermopile IR Module



The ZTP-115M is a single IR module used for non-contact surface temperature measuring. It consists of a thermopile, IR sensor, signal conditioning and voltage output.

### Applications

- Occupancy detection
- HVAC
- Appliance
- Microwave oven

### Features

- Non-contact measurement
- Wider surface area measurement
- Small-size sensor package
- Included ambient temperature - (thermistor) sensor for compensation
- High sensitivity
- Fast response time
- Low cost
- Analog output

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# Specifications

## Supply Voltage

Single Supply (+5V)

## Supply Current

Typical 2.7 mA

## Response Time

0.3 ~ 0.6 second

## Range of Measuring Temperature

-40°C ~ 145°C

## Operating Temperature

-20°C ~ 100°C

## Storage Temperature

-20°C ~ 120°C

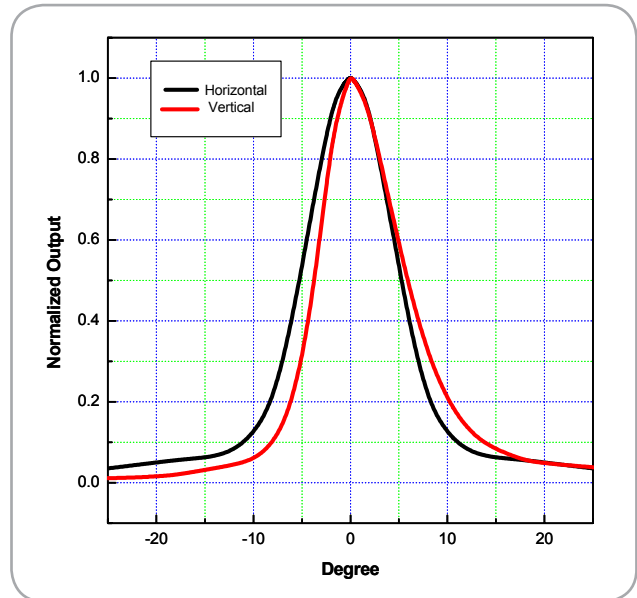
## Thermopile Sensor

ZTP-115

# Field of View

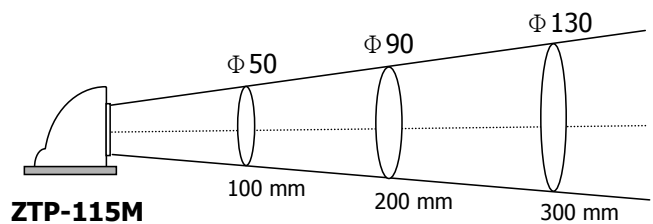
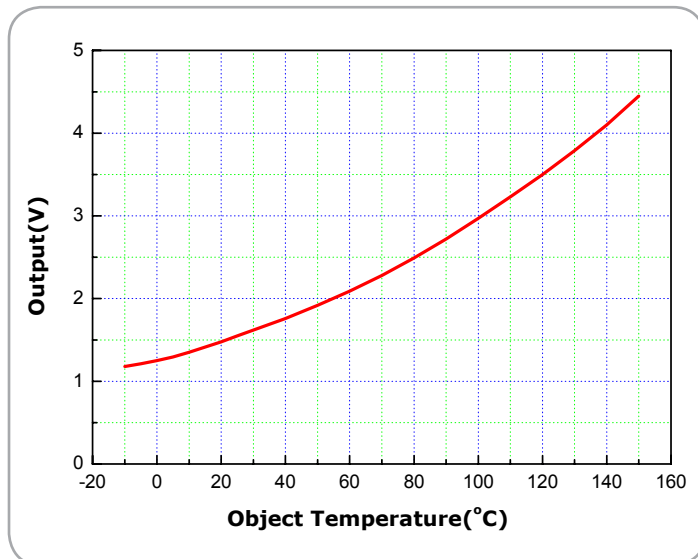
- Horizontal Normalized Output (above 50%) :  $\pm 5.5^\circ$
- Vertical Normalized Output (above 50%) :  $+6^\circ / -3.5^\circ$

\*Condition : Distance of IR Point Source to Reflector : 170 mm

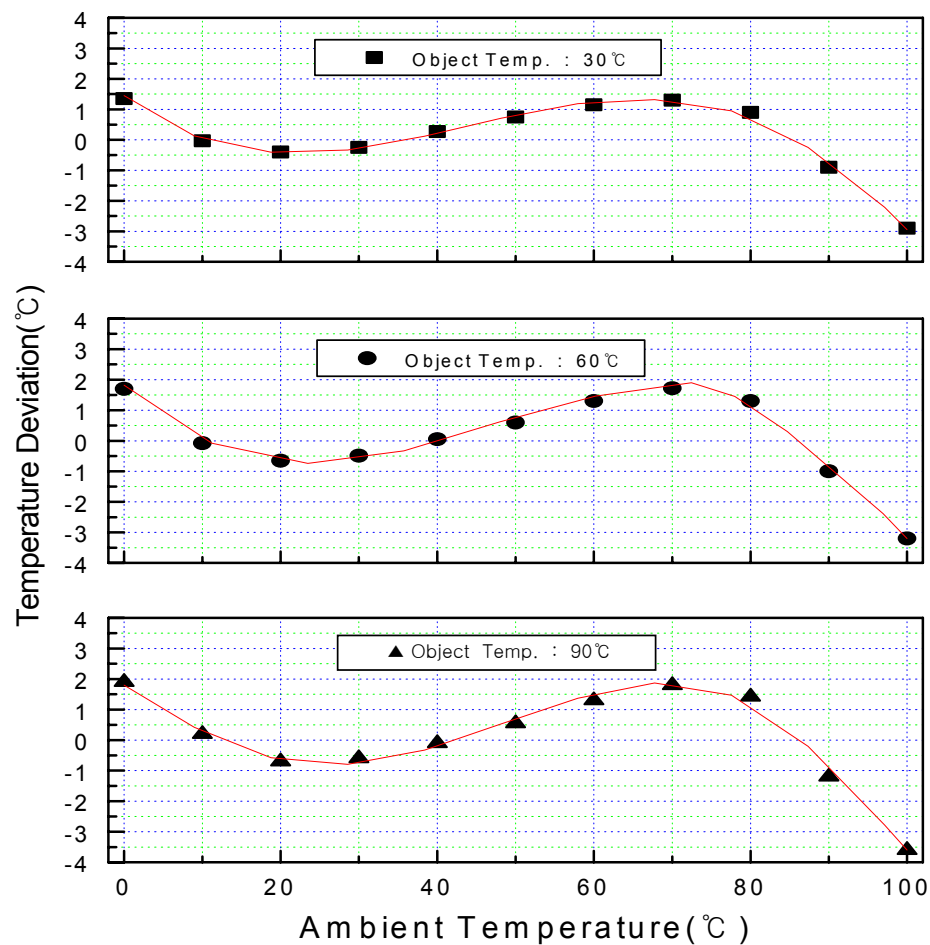


- Spot Size of Normalized Output (above 10%)

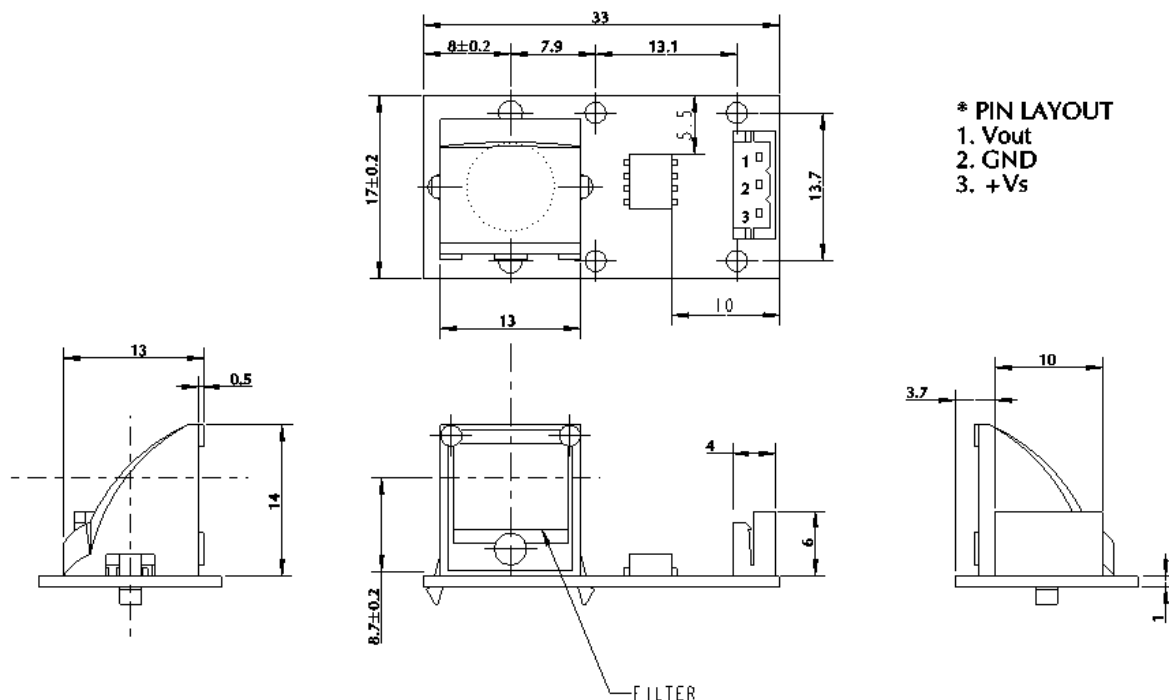
# Sensitivity



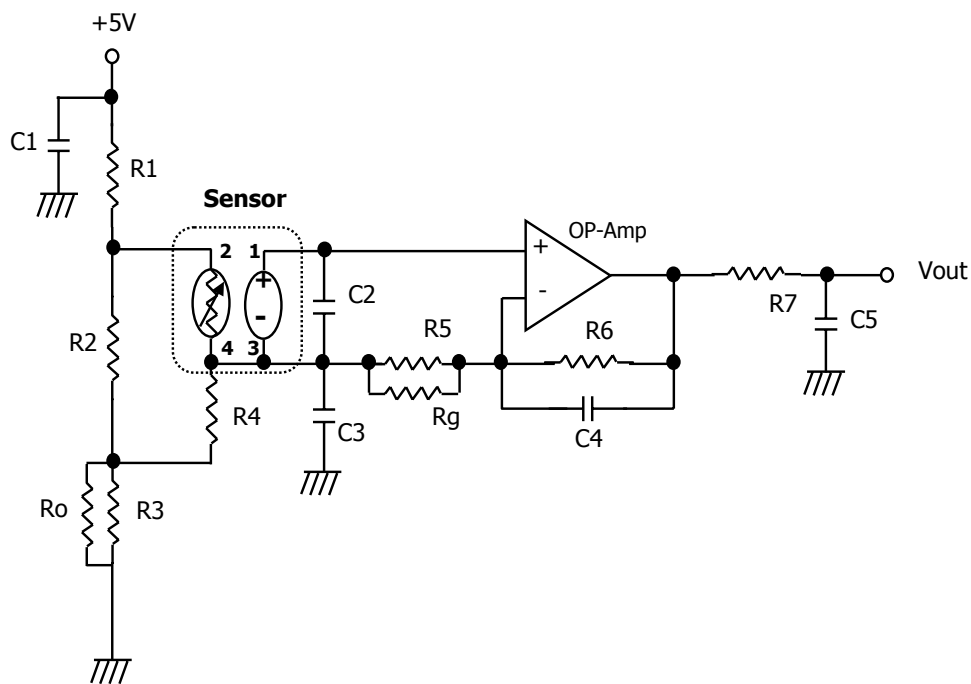
## Temperature Accuracy (Typical)



## Outline of Sensor Packaging and Pin Arrangement



## Module Circuit



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