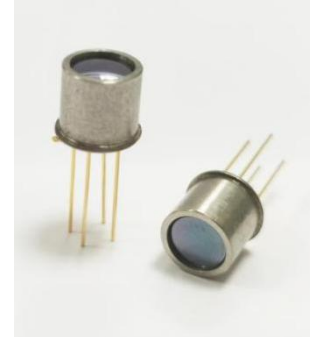


# XGZT264 THERMOPILE SENSOR

20-60cm Distance Measurement Version

## FEATURES

- 1) MEMS Thermopile element
- 2) TO-39 Package
- 3) Fast response, wide temp. Measurement.
- 4) Large-caliber infrared optical design
- 5) High accuracy NTC



## APPLICATIONS

- 1) Remote temperature measurement and monitoring
- 2) Home smart and comfortable air-conditioning control
- 3) Automatic temperature control of raw materials in industrial production
- 4) Intelligent microwave and oven heating temperature control feedback
- 5) Remote temperature measurement of household appliances, food, etc

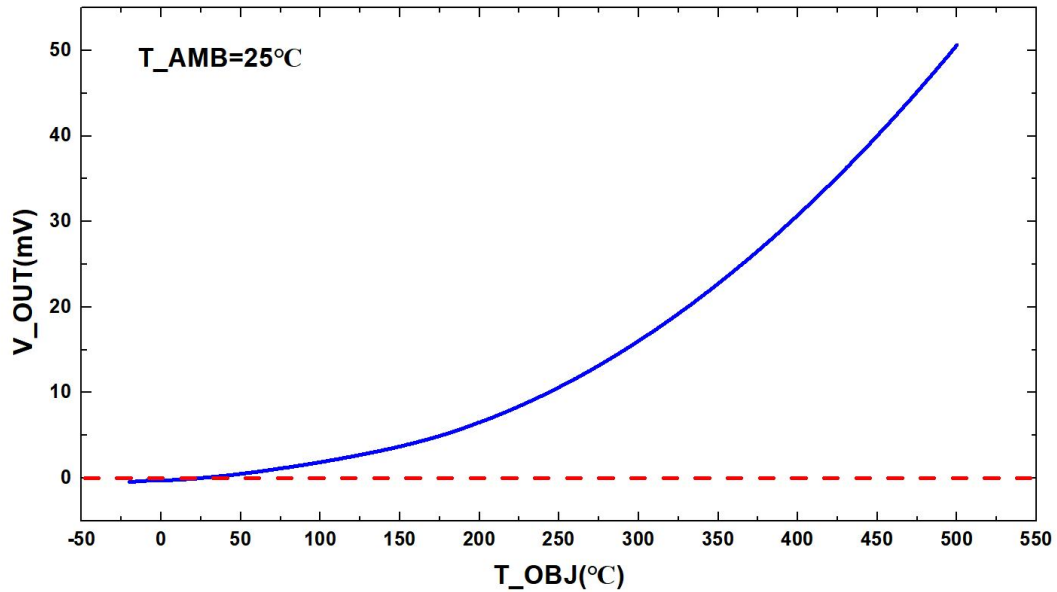
## PERFORMANCE SPECS

Parameter	Value	Unit	Conditions
Chip size	1.1 X 1.1	mm	
Sensitive area	0.76 X 0.76	mm	
Field of view	8	o	At 50 % intensity points
Thermopile resistance	129±30%	kΩ	temp=25°C
Noise voltage	59.9	nV/Hz <sup>1/2</sup>	temp=25°C
Responsivity	60	V/W	500K(5.5μm, long pass)
Temp. Coefficient of resistance	0.1	%/°C	temp=25°C - 75°C
Time constant	25	ms	
Specific detectivity	7.6E07	cmHz <sup>1/2</sup> /W	500K, 1Hz
NCT	100 ± 3%	KΩ	25°C
Thermistor BETA-value	3950 ± 1%	K	25°C/50°C

## ABSOLUTE MAXIMUM RATINGS

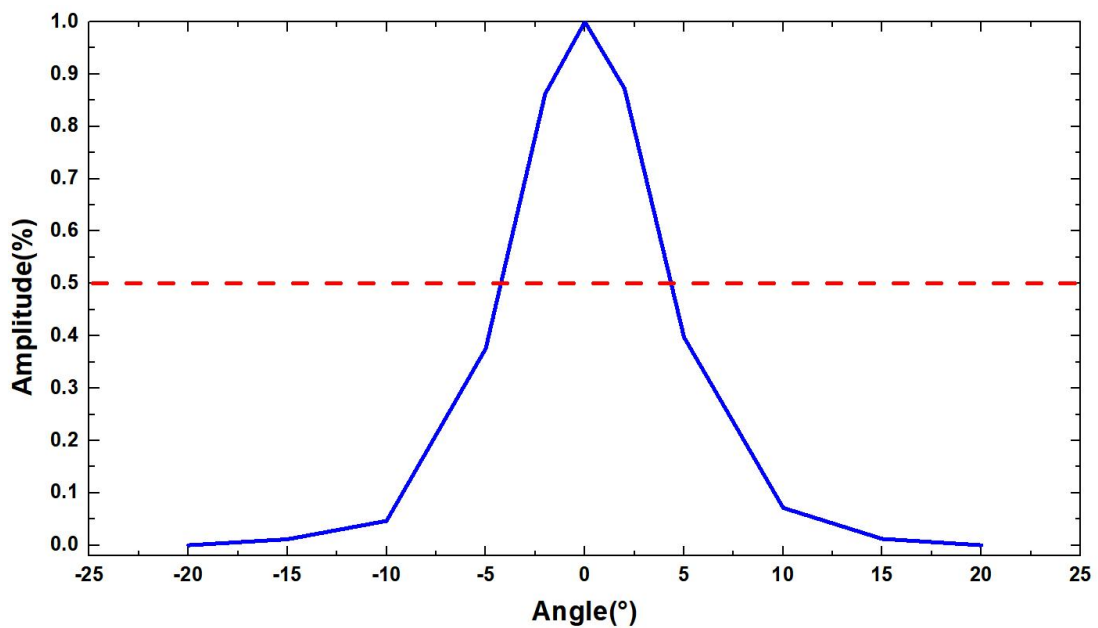
Parameter	Value	Unit
Operating temperature	-20 to +100	°C
Storage Temperature	-40 to +125	°C

## TYPICAL PERFORMANCE CURVES

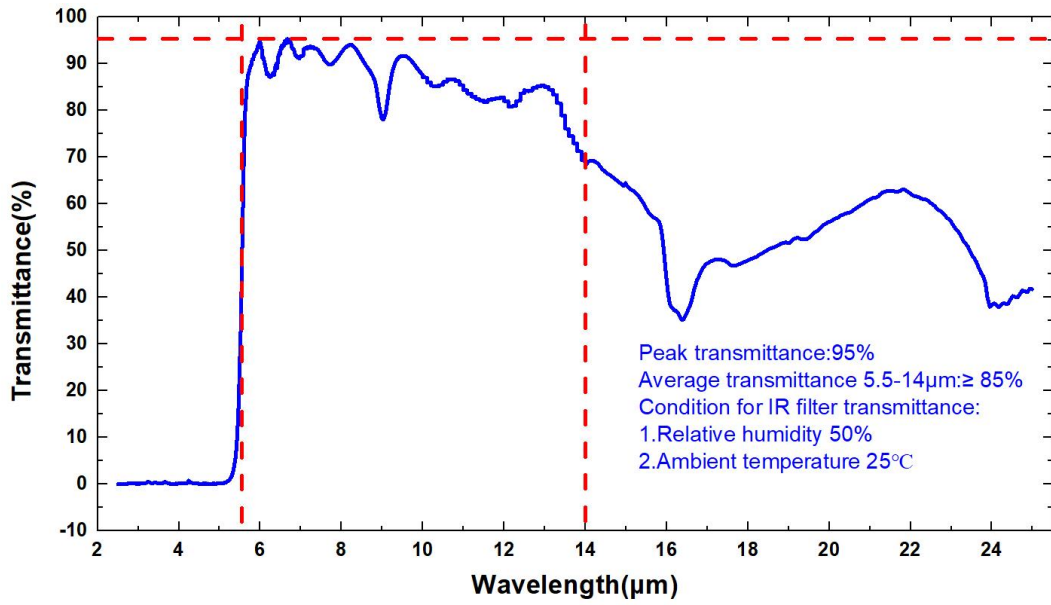


Full contact in full field of view at 25°C with a 30cm measurement distance.

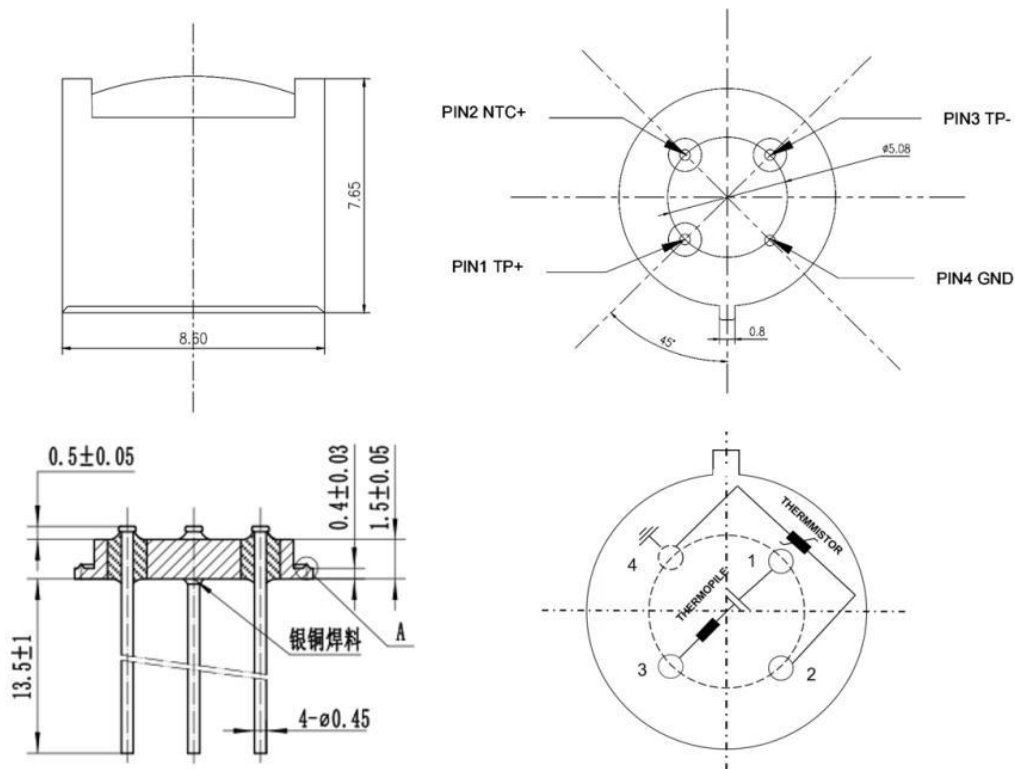
## OPTICAL CURVES



## IR CHARACTERISTICS



## MECHANICAL DIMENSION



## ELECTRICAL CONNECTIONS

Pin	1	2	3	4
Define	Thermopile+	NTC	Thermopile-	GND

### 【 SAFETY NOTES 】

Using these sensors products may malfunction due to external interference and surges, therefore, please confirm the performance and quality in actual use. Just in case, please make a safety design on the device (fuse, circuit breaker, such as the installation of protection circuits, multiple devices, etc.), so it would not harm life, body, property, etc even a malfunction occurs.

To prevent injuries and accidents, please be sure to observe the following items:

- The driving current and voltage should be used below the rated value.
- Please follow the terminal connection diagram for wiring. Especially for the reverse connection of the power supply, it will cause an accident due to circuit damage such as heat, smoke, fire, etc.
- In order to ensure safety, especially for important uses, please be sure to consider double safety circuit configuration.
- Because the sensor PIN is sharp, please be careful not to hurt your body when using it.

### 【 WARRANTY 】

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