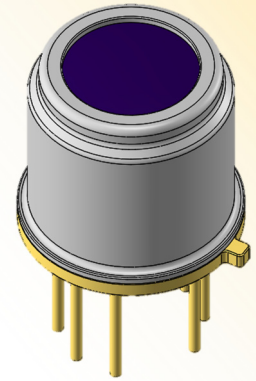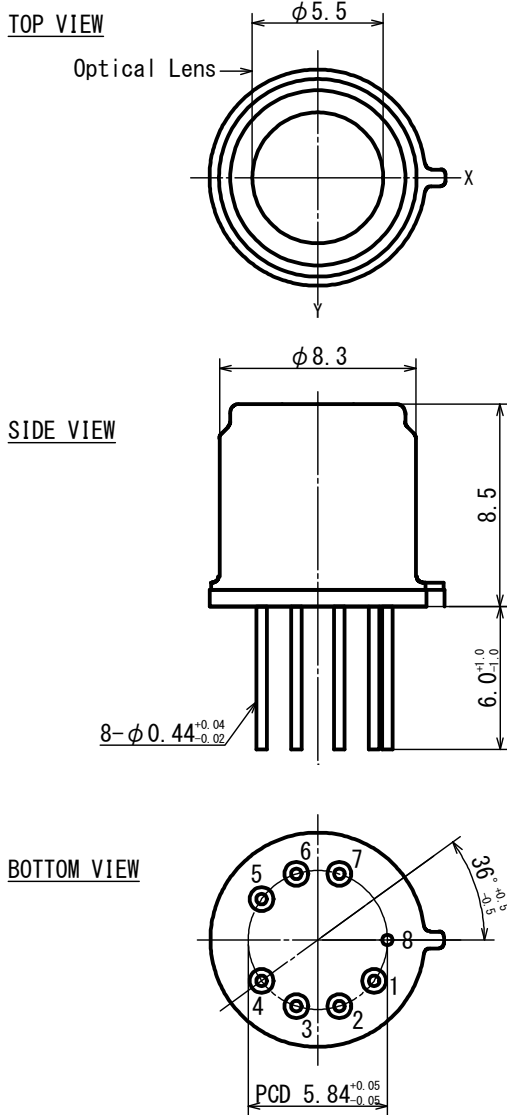# Thermopile sensor
A3A01S-CU-33-300

Nicera

■ Applications   **Printer**
(Thermal roller temperature detection)
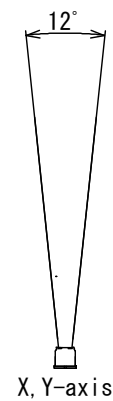
■ Feature   **ASIC built-in thermopile (Analog output)**
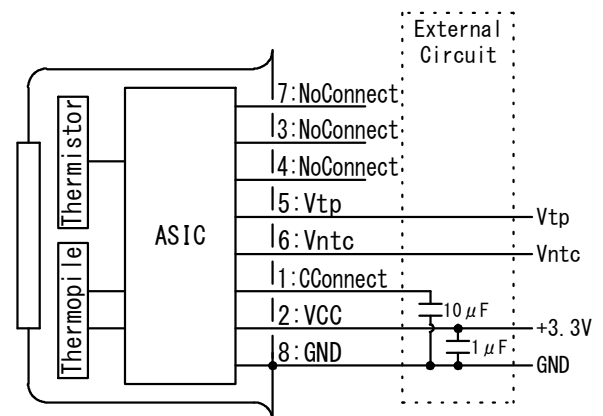**Focused detection (Single element)**

TO-5

Dimensions

TOP VIEW

φ5.5

Optical Lens

SIDE VIEW

φ8.3

8.5

6.0$^{+1.0}_{-1.0}$

8−φ0.44$^{+0.04}_{-0.02}$

BOTTOM VIEW

6 7
5   8
4   1
3 2

36°$^{+0.5}_{-0.5}$

PCD 5.84$^{+0.05}_{-0.05}$

Tolerance with no specified : +/- 0.2

FOV

12°

X, Y-axis

Circuit diagram

Thermistor

Thermopile

ASIC

External Circuit

7:NoConnect
3:NoConnect
4:NoConnect
5:Vtp — Vtp
6:Vntc — Vntc
1:CConnect
2:VCC — 10μF — +3.3V
8:GND — 1μF — GND

■ Main Parameter

Parameter	Condition	Spec.			Unit
		Min.	Typ.	Max.	
Operating Voltage		3	3.3	3.6	V
Detection Temperature		-20		300	℃
Operating Temperature		-20		100	℃
Storage Temperature		-30		105	℃
Accuracy	Tobj=200℃、Tamb=25℃	-3		+3	℃
Time Constant				200	msec.