

GP2AP03VT00F



Application

Smartphone / Robot/ Touchless switch

Property

TOF / I2C output compatible / Compact package.

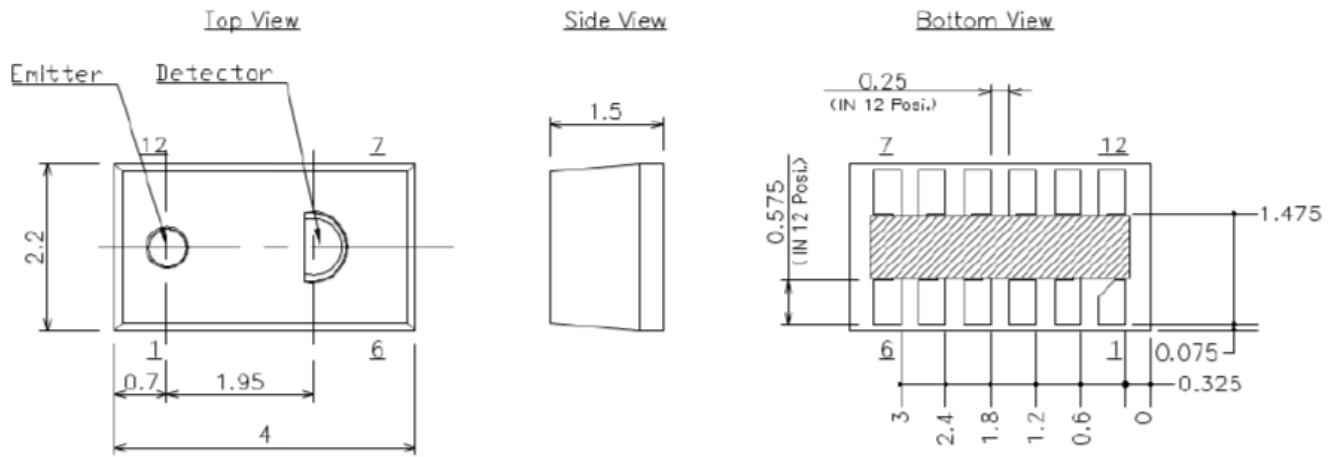
Introduction

Integrated with a photosensitive element, ultra-compact: 4.0×2.2×1.5 mm. Equipped with a TDC circuit for high precision, enabling high-accuracy ranging at close distances I2C interface"

Specifications (T=25°C)

Items	Symbols	
Supply Voltage	VCC	3-3.5V
VCSEL Voltage	VLED	3-3.5V
I2C Voltage	VDDIO	1.7-3.5V
Distance Range	L	2.5-100mm
Operating Temperature	To	-20°C ~ +70°C
Storage Temperature	Ts	-40°C ~ +85°C
SCL, SDA input low level	VIL	-0.25-0.5V
SCL, SDA input high level	VIH	1.3- VDDIO+0.15V
Current consumption	ICC_GS	1.7mA
Current consumption (ALS)	ICC_ALS	100 μ A
Current consumption(Power Down)	ICC-S	<8 μ A
SDA output low level voltage	VOL_SDA	0.4V
INT output low level voltage	VOL_INT	0.4V
Range distance(100mm)		±6mm

Outline Dimensions



Unit : mm

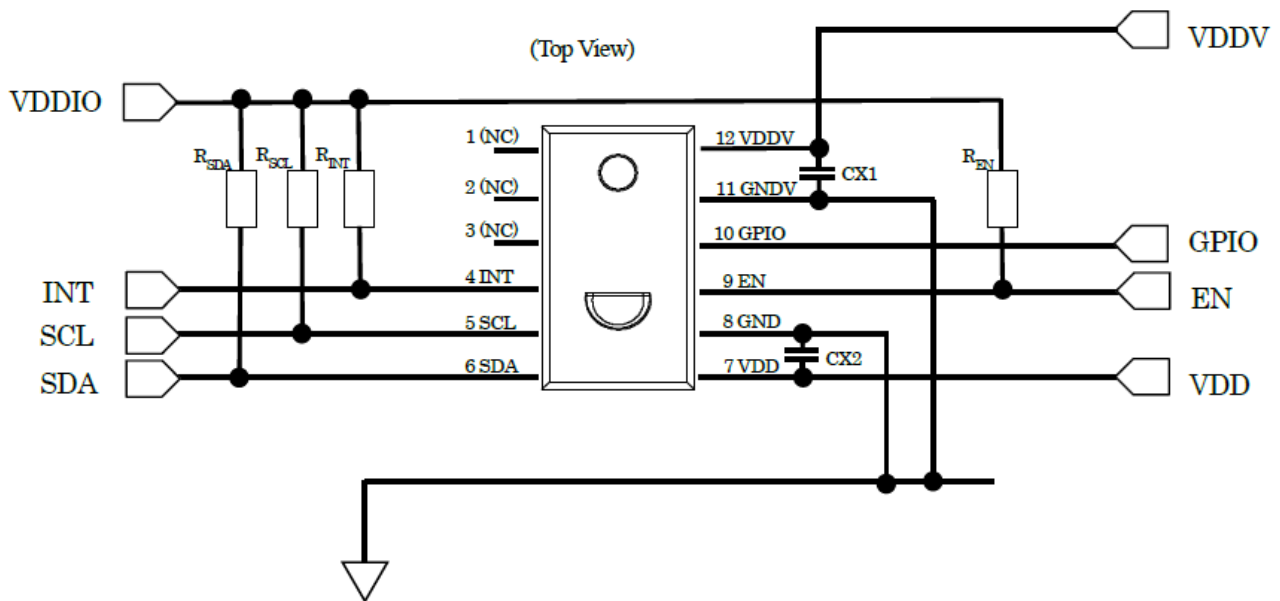
(Note)

- (1) area : Au plating
- (2) Unspecified tolerance shall be ± 0.1 mm

Pin Description

Pin No.	Pin Name
1	(NC)
2	(NC)
3	(NC)
4	INT
5	SCL
6	SDA
7	VDD
8	GND
9	EN
10	GPIO
11	GND V
12	VDD V

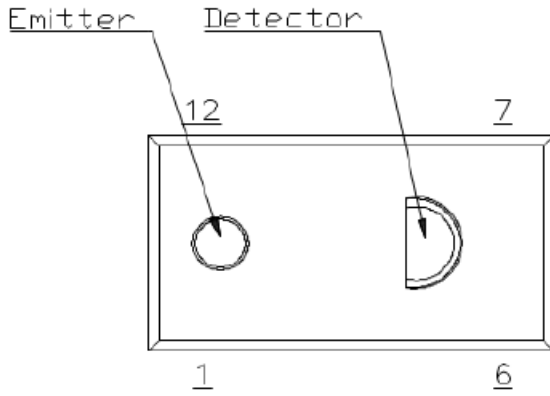
Connection Circuit



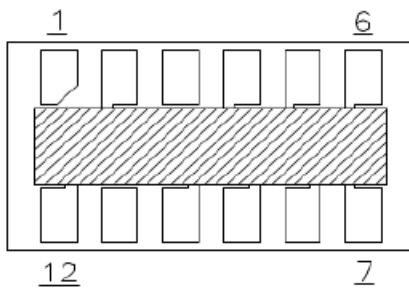
Components	Recommended values
CX1	4.7 μ F
CX2	100nF
R _{SDA*1}	1~10k Ω
R _{SCL*1}	1~10k Ω
R _{INT}	47k Ω
R _{EN}	47k Ω

Foot pattern of PCB

Top View



Bottom View



Pin Description

Pin No.	Pin Name
<u>1</u>	(NC)
<u>2</u>	(NC)
<u>3</u>	(NC)
<u>4</u>	INT
<u>5</u>	SCL
<u>6</u>	SDA
<u>7</u>	VDD
<u>8</u>	GND
<u>9</u>	EN
<u>10</u>	GPIO
<u>11</u>	GND V
<u>12</u>	VDD V

Recommendable size of solder creamed paste

