



**STC-N54 (NTSC / Low Resolution)**

**STC-N64 (NTSC / High Resolution)**

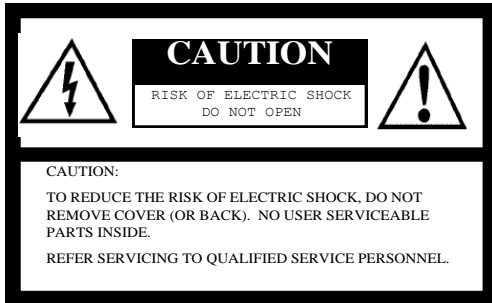
**STC-P54 (PAL / Low Resolution)**

**STC-P64 (PAL / High Resolution)**

## **Protocol Specification**

**NTSC / PAL CCD Board Camera**

## Safety Precautions



For U.S.A.

Warning:

This equipment generates and uses radio frequency energy and if not installed and used properly, I.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

For Canada

Warning:

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## Product Precautions

- Handle the camera with care. Do not abuse the camera. Avoid striking or shaking it. Improper handling or storage could damage the camera.
- Do not pull or damage the camera cable.
- During camera use, do not wrap the unit in any material. This will cause the internal temperature of the unit to increase.
- Do not expose the camera to moisture, or do not try to operate it in wet areas.
- Do not operate the camera beyond its temperature, humidity and power source ratings.
- While the camera is not being used, keep the lens or lens cap on the camera to prevent dust or contamination from getting in the CCD or filter area and scratching or damaging this area.
- Do not keep the camera under the following conditions:
  - In wet, moist, and high humidity areas
  - Under hot direct sunlight
  - In high temperature areas
  - Near an object that releases a strong magnetic or electric field
  - Areas with strong vibrations
- Use a soft cloth to clean the camera. Use pressured air spray to clean the surface of the glass. DO not scratch the surface of the glass.

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## Contents

I. Specifications .....	5
II. Pin Assignments .....	6
III. Dimensions.....	7-10

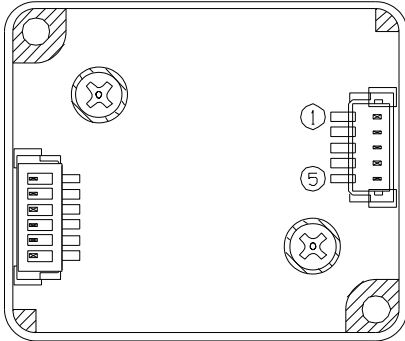
## I. Specifications

Product		STC-N54	STC-N64	STC-P54	STC-P64	
Electronic Specifications	Imager	¼" NTSC low resolution Interline CCD (SHARP: RJ2411AB0PB)	¼" NTSC high resolution Interline CCD (SONY: ICX648BKA)	¼" NTSC low resolution Interline CCD (SHARP: RJ2421AB0PB)	¼" NTSC high resolution Interline CCD (SONY: ICX649BKA)	
	Active Picture Element	512 (H) x 492 (V)	768 (H) x 494 (V)	512 (H) x 582(V)	752 (H) x 582 (V)	
	Chip Size	-	4.34 (H) x 3.69 (V) mm	-	4.34 (H) x 3.69 (V)mm	
	Cell Size	7.2 (H) x 5.6 (V) μm	4.75 (H) x 5.55 (V) μm	7.2 (H) x 5.6 (V) μm	4.85 (H) x 4.65 (V) μm	
	Scanning System	2:1 Interlace				
	Horizontal Frequency	15.734 kHz		15.625 kHz		
	Vertical Frequency	59.94 MHz		50.00 MHz		
	Sync. System	Internal				
	Horizontal Resolution	330 TV Lines	480 TV Lines	330 TV Lines	480 TV Lines	
	Video Output	VBS 1.0Vp-p 57 Ohm				
	Min. Scene Illumination	0.61 Lux at F1.2	0.71 Lux at F1.2	0.54 Lux at F1.2	0.54 Lux at F1.2	
	S/N Ratio	More than 48 dB				
	Electronic Shutter	Electronic Iris (1/60 to 1/100,000 seconds) (adjustable via the communication)		Electronic Iris (1/50 to 1/100,000 seconds) (adjust via the communication)		
	Gain	AGC ON (adjustable via the communication)				
	Gamma	0.45 (Adjustable via the communication)				
	White Balance	Auto white balance (2,800 to 7,000K) (Adjustable via the communication)				
	Mirror	Normal Image / Horizontal Image				
	Power	Input Voltage	+5 to +12Vdc			
		Consumption	<0.6 W			
	Mechanical Specifications	Dimensions	26 (W) x 22 (H) x variable (D) mm (excluding connectors)			
Optical Filter		includes IR cut filter				
Lens Mount		CS mount / Fixed lens / Pin hole lens / Without lens				
Weight		Approximately 70g				
Environmental Specifications	Operational Temperature	Environmental temperature: -10°C to 50°C				
	Storage Temperature	Environmental temperature: -20°C to 60°C				
	RoHS	RoHS compliance				

## II. Pin Assignments

### A. STC-N54/P54

Communication Connector: A Communication JIG is required for communication.

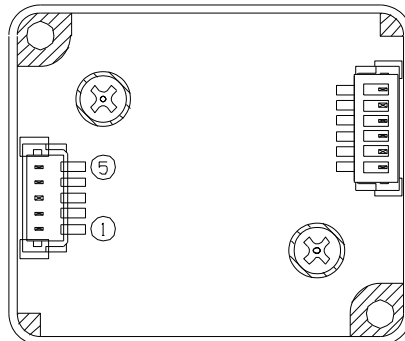


No.	Signal Type
1	Power Input
2	GND
3	Video Output
4	GND
5	Mirror Image

\* Horizontal Mirror Image appears when the 5pin is connected to the GND

### B. STC-N64/P64

Communication Connector: A Communication JIG is required for communication.



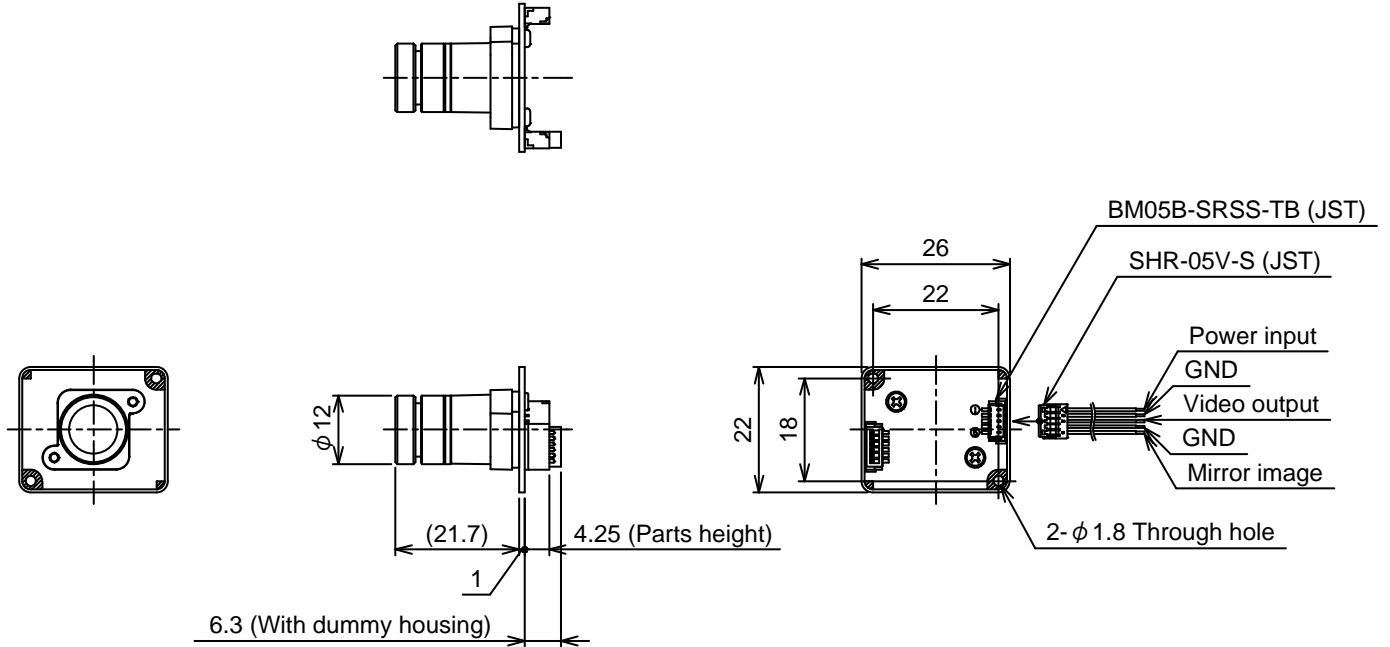
No.	Signal Type
5	Mirror Image
4	GND
3	Video Output
2	GND
1	Power Input

\* Horizontal Mirror Image appears when the 5pin is connected to the GND

### III. Dimensions

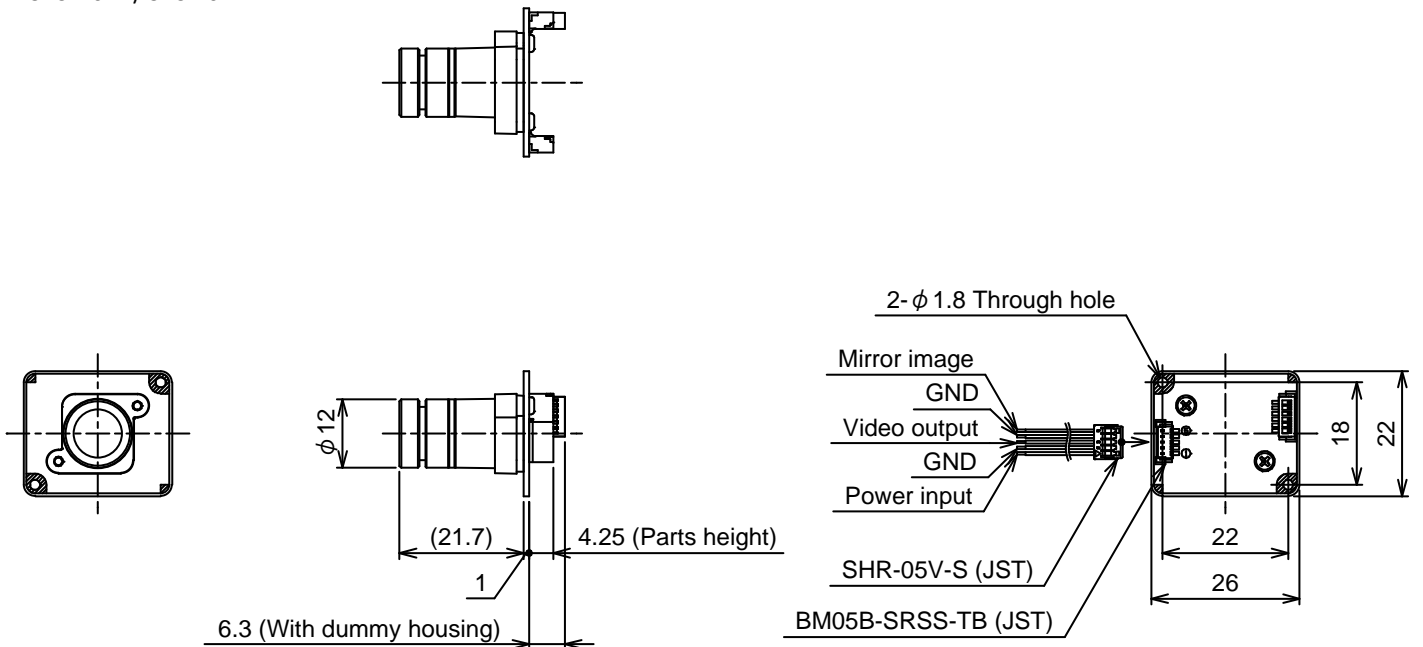
#### A. Fixed Lens Type (with 3.0mm lens)

##### 1. STC- N54L / STC-P54L



Unit: mm

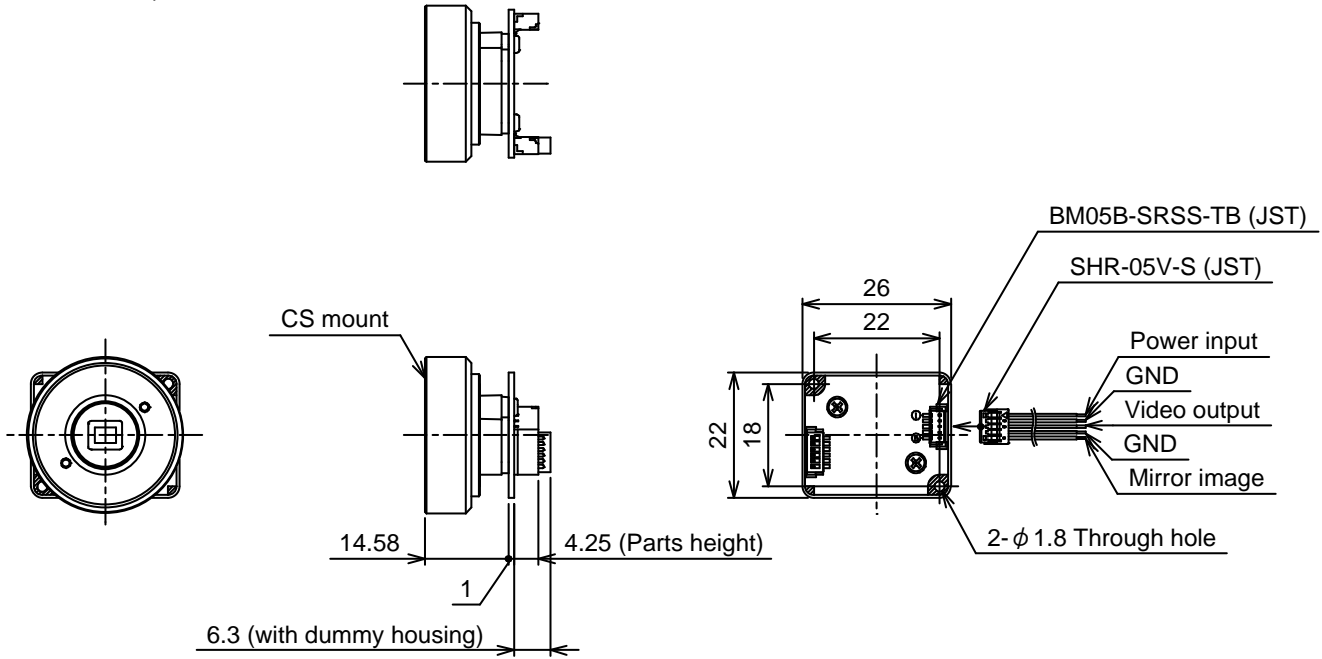
##### 2. STC-N64L / STC-P64L



Unit: mm

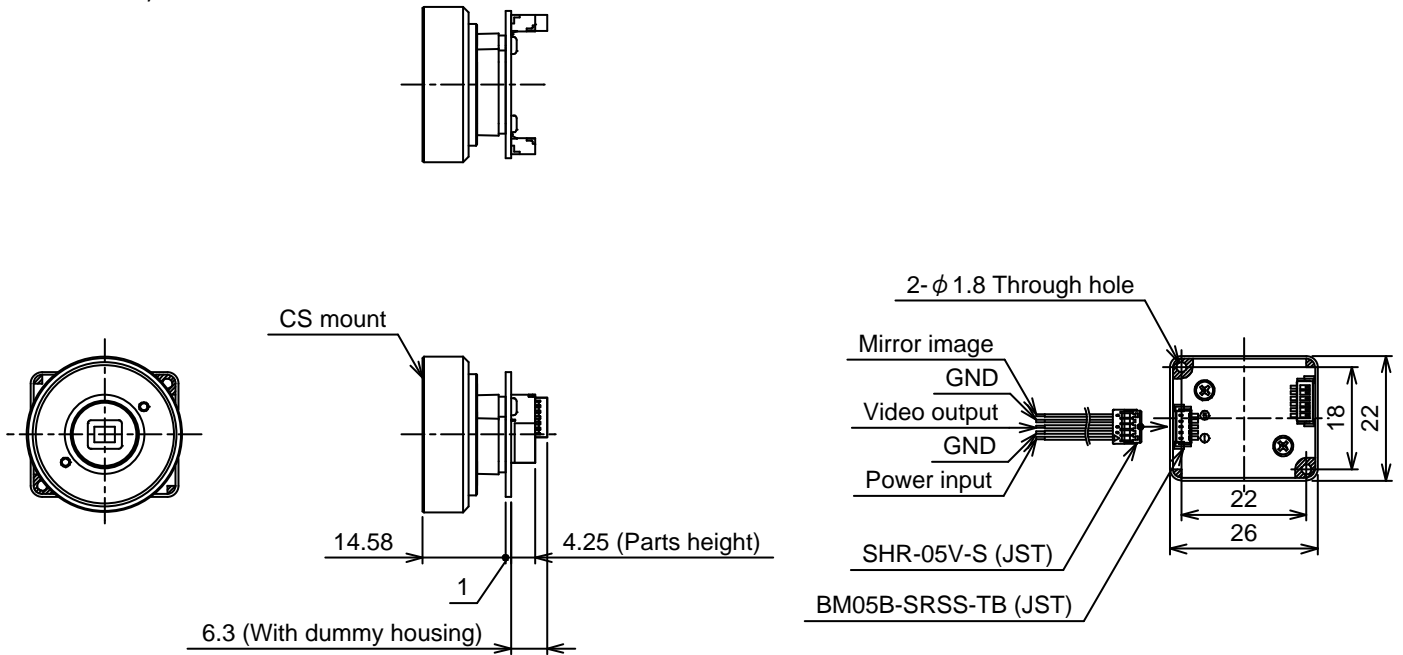
## B. CS Type

### 1. STC- N54CS / STC-P54CS



Unit: mm

### 2. STC-N64CS / STC-P64CS

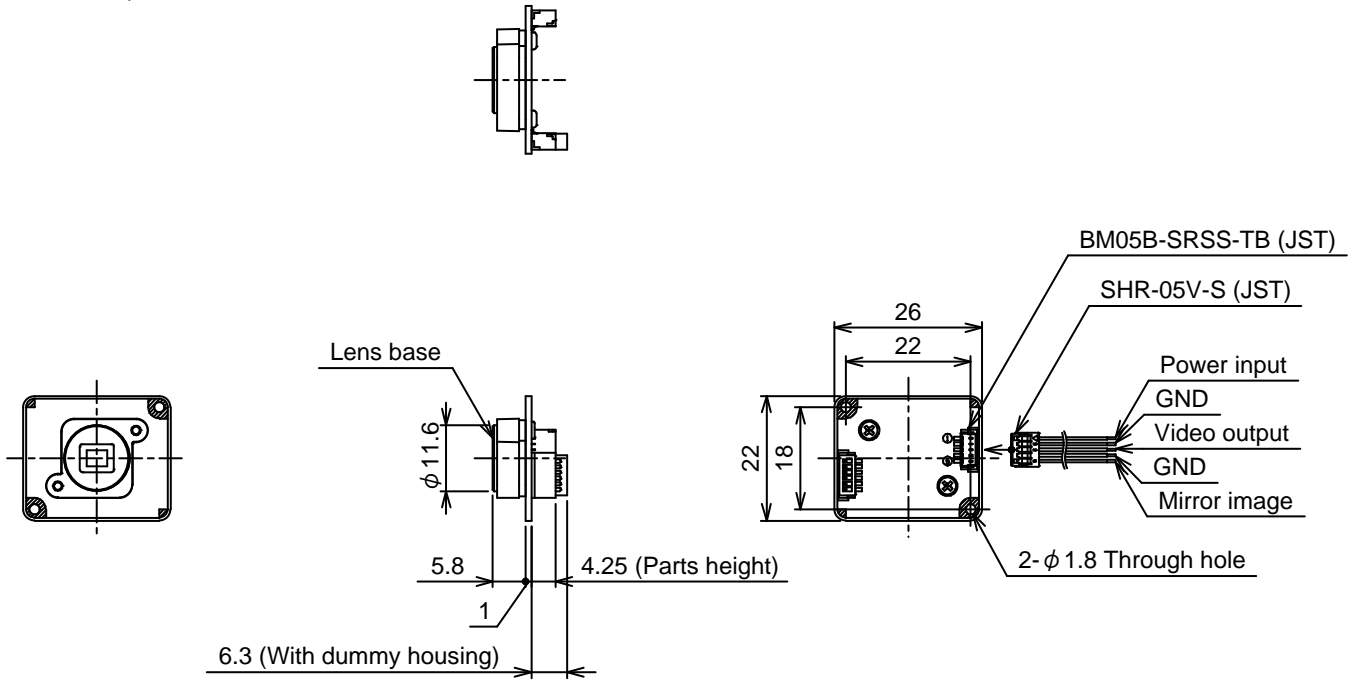


Unit: mm



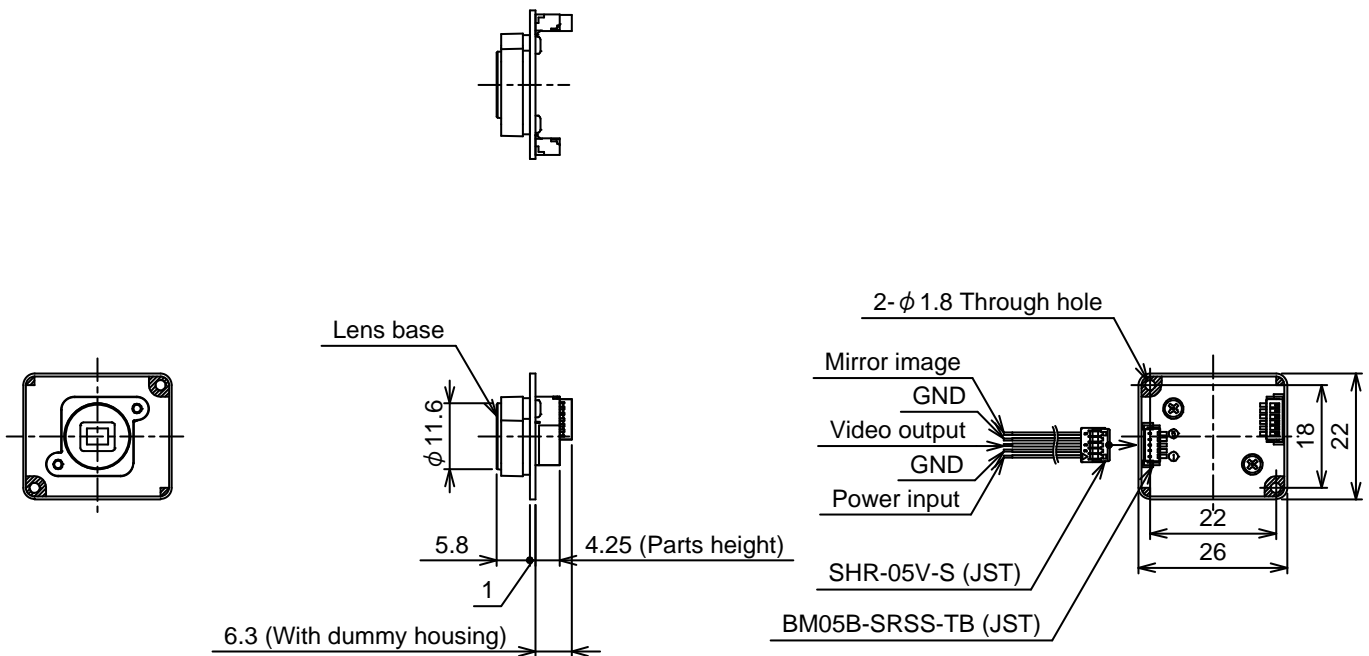
C. Without Lens Type

1. STC- N54 / STC-P54



Unit: mm

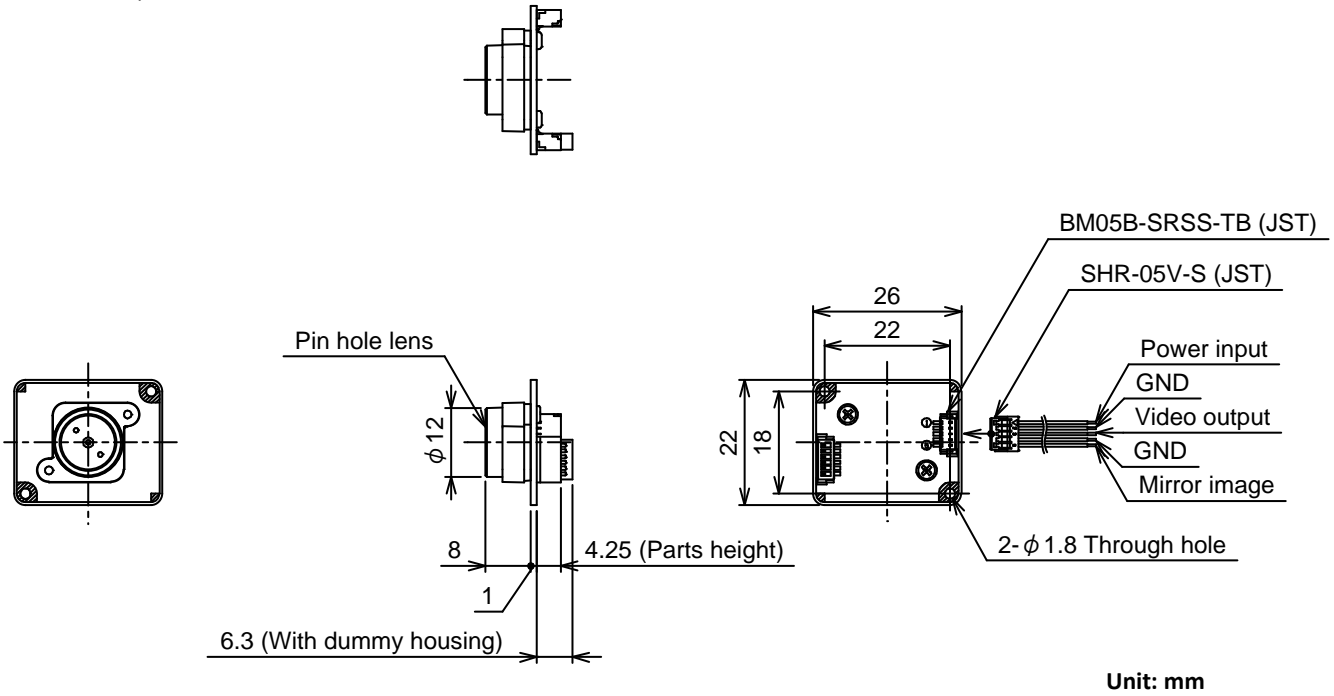
2. STC-N64 / STC-P64



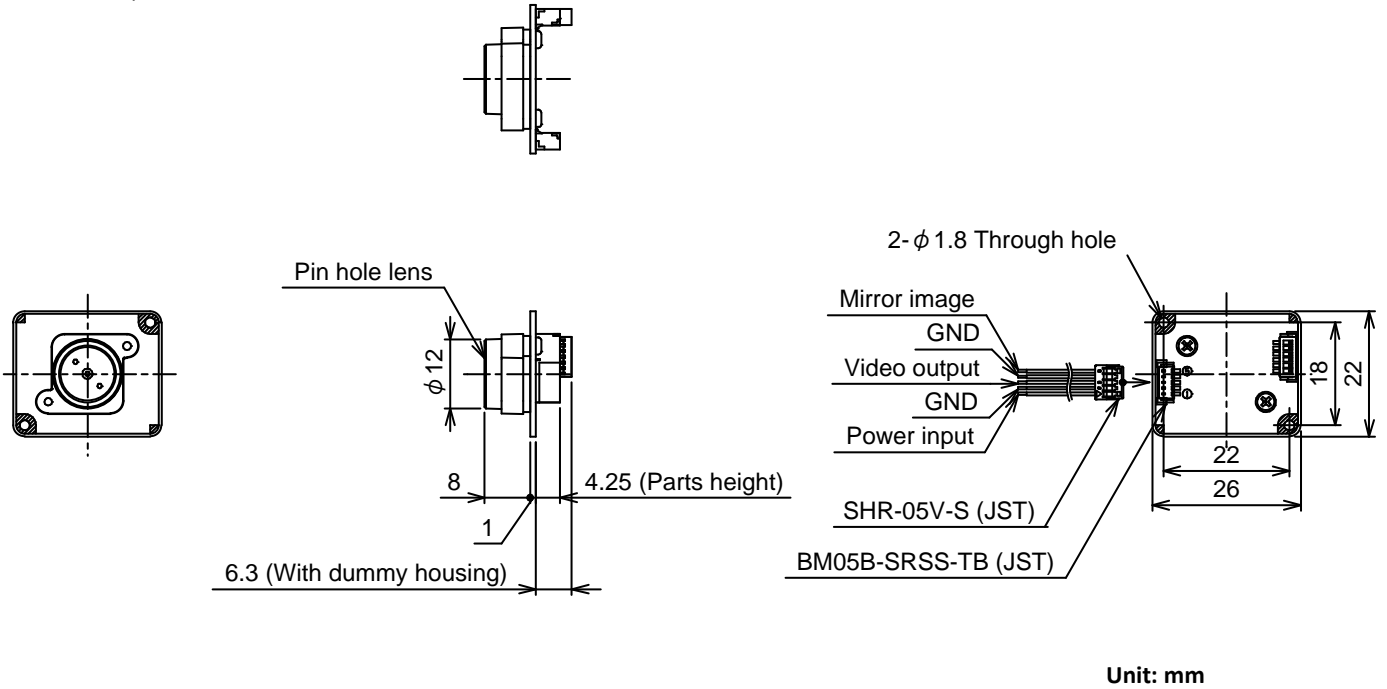
Unit: mm

## D. Pinhole Lens Type

### 1. STC- N54P / STC-P54P



### 2. STC-N64P / STC-P64P



Revisions

Rev	Date	Changes	Notes
1.0	Feb. 1, 2012	New Document	
	Feb. 27, 2012	Removed all of the "B" at the end of part numbers	"B" is STJ's nomenclature

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