

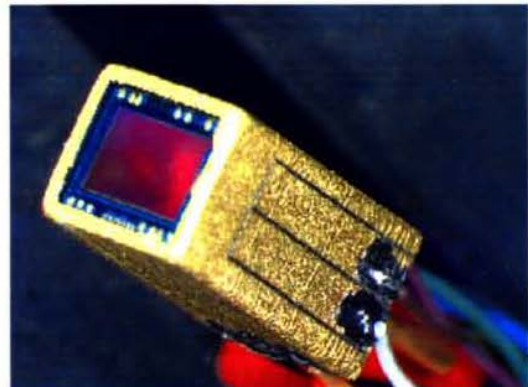
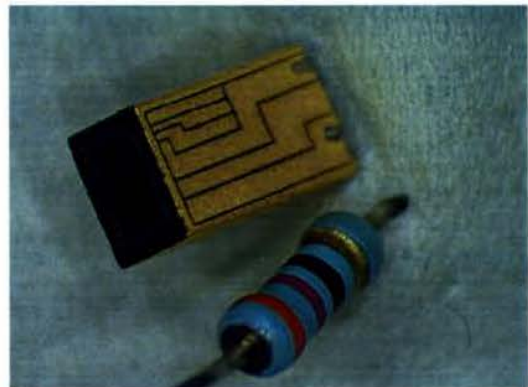


Color CCD MicroCamera Head 1/6"

SMCC06048

Features

- Extremely miniaturized color CCD camera (3,8 * 3,8 * 8,74 mm)
- Light Weight (0,27 g)
- Long length cables driving capability
- Qualified for harsh environment
- High resolution (Ye, Cy, Mg and G complementary color mosaic filter)
- High sensitivity and low smear
- No voltage adjustment (Reset Gate and substrate bias are not adjusted)
- Low dark current
- Excellent anti blooming characteristics
- Continuous variable-speed shutter
- Field period readout system
- Variable charge-storage time electronic shutter
- Recommended range of exit pupil distance : -10 mm to -∞



General Description

The 3D-μCamera is a highly miniaturized, light weight, high performance and easy-to-use color CCD Camera for endoscopes applications.

It embeds state-of-the art Sony color CCD sensors with high resolution and sensitivity, low smear and dark current, and excellent anti blooming characteristics.

The embedded electronics grant the μcamera with a long cables driving capability : up to 10 meters of cable can be connected between the camera head and the base station (20 meters cable can be connected on specific demand).

It is available for PAL and NTSC video systems.

The μcamera is packaged through 3D PLUS MCM-V technology qualified for harsh environment applications (vibrations, mechanical shocks, thermal, humidity).

A DSP controlled Electronic Board can be connected to the camera head and is providing the user with all the μcamera settings and control functions like color, brightness, contrast, image window set-up, ...



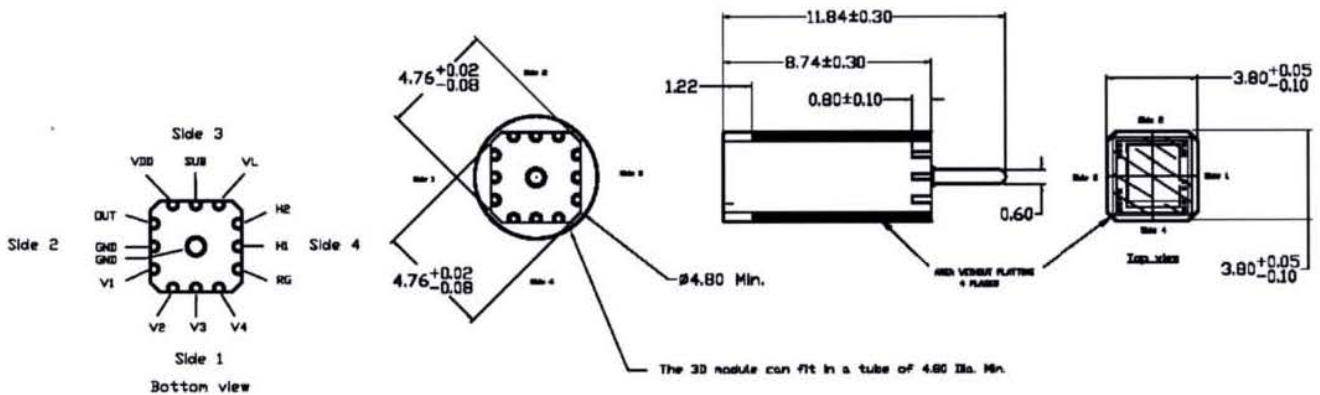
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Technical features

Features		
Video System	PAL	NTSC
Image Sensor	Interline 1/6" CCD (440.000 pixel)	
Active Pixel	3.275 μ m (H) * 3.150 μ m (V)	3.200 μ m (H) * 3.725 μ m (V)
Active Image Area	2.46 mm * 1.83 mm	2.46 mm * 1.84 mm
Resolution	752 (H) * 582 (V)	768 (H) * 494 (V)
Power Supply	+15V, -7.5V (+/- 3%)	+15V, -7.5V (+/- 3%)
Environment		
Temperature (storage)	-30°C / +80 °C	
Temperature (operating)	- 10 °C / +60°C	
Relative humidity	10 to 90 % non condensing	
Sterilization	Camera head and cable can be immersed in a disinfecting solution.	
Dimensions		
Dimensions	3,8 * 3,8 * 8,74 mm	
Weight	0,27 g.	

Mechanical drawing and Pin assignment



References

- SONY CCD Image Sensor ICX239AKE (PAL video system) data sheet referenced E98X20B0Y-PS
- SONY CCD Image Sensor ICX238AKE (NTSC video system) data sheet referenced E98X19B0Y-PS

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