



NEMOCAM-02AVG

NEMOCAM-02AVG is a 1/10-inch, Pb-free, reflowable camera module with a pixel array of 640H x 480V. The module has a 36-ball grid array and is reflow compatible. The module uses Nemotek's 2 element lens NEMO-02VG, It achieves a good SFR performances, a corner relative illumination of greater than 60% uncorrected while maintaining a TV distortion less than +1%.

PARAMETER		VALUE
Module size		4.26mmX4,26MMX2.6 mm
Full resolution		640X480 pixels (VGA)
Pixel size		2.25µmx2.25µm
Frame rate at full resolution		30fps
ADC resolution		10 bits, on chip
Responsivity		0.57V/lux-sec
Dynamic range		> 60.0dB
SNRMAX		> 42.0dB
Supply voltage		
	Analog	2.8 V
	Digital core	1.8V or 1.5V
	IO	1.8-2.8 V
Optical format		1/10-inch
F-number		2.8
Field-of-view		60° Diagonal
IR-cut filter		Yes
IR-cut frequency (T=50%)		650nm
Spatial frequency response (sfr)		
	Field 0%	at 56 lp/mm > 85%
		at 112 lp/mm > 65%
	Field 80%	at 56 lp/mm > 60%
		at 112 lp/mm > 35%
System relative illumination (before correction)		60%
MAX TV distortion		<1%
Operating temperature (ambient)		- 40°C to + 80°C

Reflowable Module features

- Ultra-compact
- 60 Degree Diagonal Field-of-view
- 1/10th Inch two-element, 4 surface lens
- Bottom contact 36-ball grid array package
- Pb-free solder reflowable

Electrical Test

- O/S tests
- Leakage (input, output, tristate)
- Dynamic current, H/W standby current, S/W standby
- Current

Image characterization tests

- Defect and blemish
- Relative illumination
- Signal to noise ratio
- Dynamic range
- Optical center

Camera characterization tests

- Resolution
- Distortion
- Rotation, Tilt tests
- Field of view
- Color accuracy



STACKED LENS ON PACKAGE

TOP VIEW OF CAMERA



BOTTOM VIEW OF CAMERA

A fully Tested Camera