



FPA-64x64-C InGaAs Focal Plane Array

Near-Infrared (0.9 - 1.7 μm)

FEATURES

- 64 x 64 Array Format
- 0.9 μm - 1.7 μm Spectral Range
- 32-pin CLCC Package
- Typical Pixel Operability > 99.5 %
- Quantum Efficiency > 70 %
- Built-in Temperature Sensor
- 2 MHz Pixel Rate

APPLICATIONS

- Near-Infrared Imaging
- Spectrometry
- Semiconductor / Solar Panel Inspection
- See through Fog / Smoke
- Ice / Slush / Moisture Mapping
- Industrial Thermal Imaging

GENERAL DESCRIPTIONS

PARAMETER	UNIT	VALUE
Sensor Technology	---	Planar InGaAs PIN
Spectral Range	μm	0.9 - 1.7
Pixel Array	---	64 x 64
Pixel Pitch	μm	40
Image Size	mm	2.56 x 2.56
Package Type	---	32-pin Ceramic LCC
Weight	g	TBD



SPECIFICATIONS (ITS¹ = 20°C)

PARAMETER		UNIT	TYPICAL VALUE	CONDITIONS
Dark Current		fA	≤ 120	Photopixel Biased @ -0.5 V
Quantum Efficiency * Fill Factor (QEFF)		%	≥ 70	λ = 1.0 μm - 1.6 μm
Response Nonuniformity		%	≤ 5	At 50 % Well Occupation
Response Nonlinearity (Max. Peak-to-Peak Deviation)		%	≤ 1	10 % - 90 % Well Occupation Range
Charge Capacity	@High Gain, 3.6 μV/e ⁻	Me ⁻	0.5	ROIC Specifications
	@Low Gain, 0.86 μV/e ⁻		1.85	
Readout Noise		e ⁻	≤ 500	High Gain, Integration Time = 1 ms
Output Swing		V	> 1.6	
Minimum Integration Period		μs	5.5	
Pixel Operability		%	> 99.5	Percentage of Pixels with QEFF Deviation within ±20 % * (QEFF Mean).

1. Readings from Integrated temperature sensor (ITS).

ABSOLUTE MAXIMUM RATINGS

PARAMETER	UNIT	MIN.	MAX.
Operating Temperature ²	°C	-25	+70
Storage Temperature ²	°C	-40	+70
Power Consumption	mW	---	70

2. Non-condensing environment.

