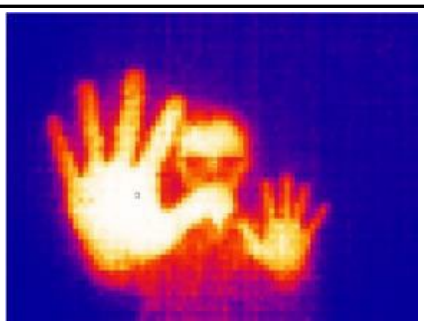
<Infrared Sensors>

MIR8060B1

THERMAL DIODE INFRARED SENSOR, 80x60 pixels, FOV 78°x53°



DESCRIPTION

The MIR8060B1 is an infrared sensor array applying unique thermal diode technology. It has an SPI interface and comes together with an IR lens and an ASIC with an OTP* memory that stores the sensitivity calibration data.

FEATURES

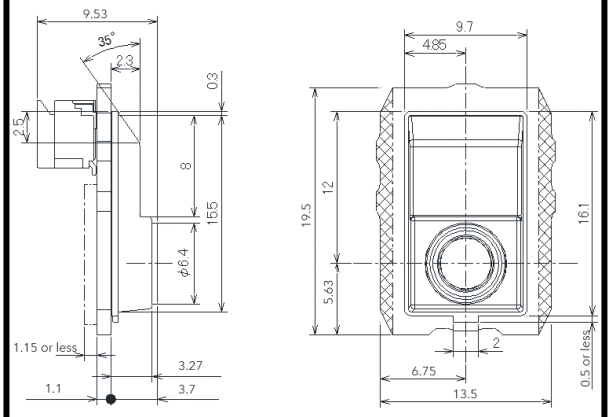
- Pixel resolution: 80x60 pixels
- FOV : 78° x 53°
- Flame rate : 4fps, 8fps
- NETD : 100mK (Typ.) @4fps
- Spectral range : 8 to 14 um

APPLICATIONS

- Security, Smart Building, People Counting, Temperature measurement, etc.

OTP*: one time programmable

OUTLINE DRAWING Unit: millimeters



Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
VDD	Power Supply Voltage	-0.3	3.8	V
MISO MOSI CLK NRST	Digital In-Out	-0.3	3.8	V
Tstg	Storage Temperature	-40	85	° C
Top	Operation Temperature	-20	85	° C

Electrical Characteristics

Symbol	Parameter	Test Conditions	Min	Typ.	Max	Unit
Id	Current Consumption	Vdd: 3.3V Ta: 24° C			50	mA
NETD	Noise Equivalent Temp. Difference			100 @4fps		mK
FOVx	Field of View			78		°
FOVy	Field of View			53		°

Main Revision for this Edition

No.	Date	Revision	
		Pages	Points
*	11/Jul./2022	3	New Release

Keep safety first in your circuit designs!

Mitsubishi Electric Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of non-flammable material or (iii) prevention against any malfunction or mishap.

Notes regarding these materials

- These materials are intended as a reference to assist our customers in the selection of the Mitsubishi semiconductor product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Mitsubishi Electric Corporation or a third party.
- Mitsubishi Electric Corporation assumes no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.
- All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Mitsubishi Electric Corporation without notice due to product improvements or other reasons. It is therefore recommended that customers contact Mitsubishi Electric Corporation or an authorized Mitsubishi Semiconductor product distributor for the latest product information before purchasing a product listed herein.
  The information described here may contain technical inaccuracies or typographical errors. Mitsubishi Electric Corporation assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors.
  Please also pay attention to information published by Mitsubishi Electric Corporation by various means, including the Mitsubishi Semiconductor home page (http://www.MitsubishiElectric.com/).
- When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Mitsubishi Electric Corporation assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.
- Mitsubishi Electric Corporation semiconductors are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact Mitsubishi Electric Corporation or an authorized Mitsubishi Semiconductor product distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.
- The prior written approval of Mitsubishi Electric Corporation is necessary to reprint or reproduce in whole or in part these materials.
- If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination.
  Any diversion or re-export contrary to the export control laws and regulations of Japan and/or the country of destination is prohibited.
- Please contact Mitsubishi Electric Corporation or an authorized Mitsubishi Semiconductor product distributor for further details on these materials or the products contained therein.