

# Monochrome image sensor heads for FAX

## IA2008-MB82A

An Epoch-making, Lightweight, Compact Monochrome Image Sensor ROHM's expertise of ROHM LSI circuit design and accumulated manufacturing technology of thermal printheads are combined to produce the industry's smallest and lightest monochrome contact image sensor heads.

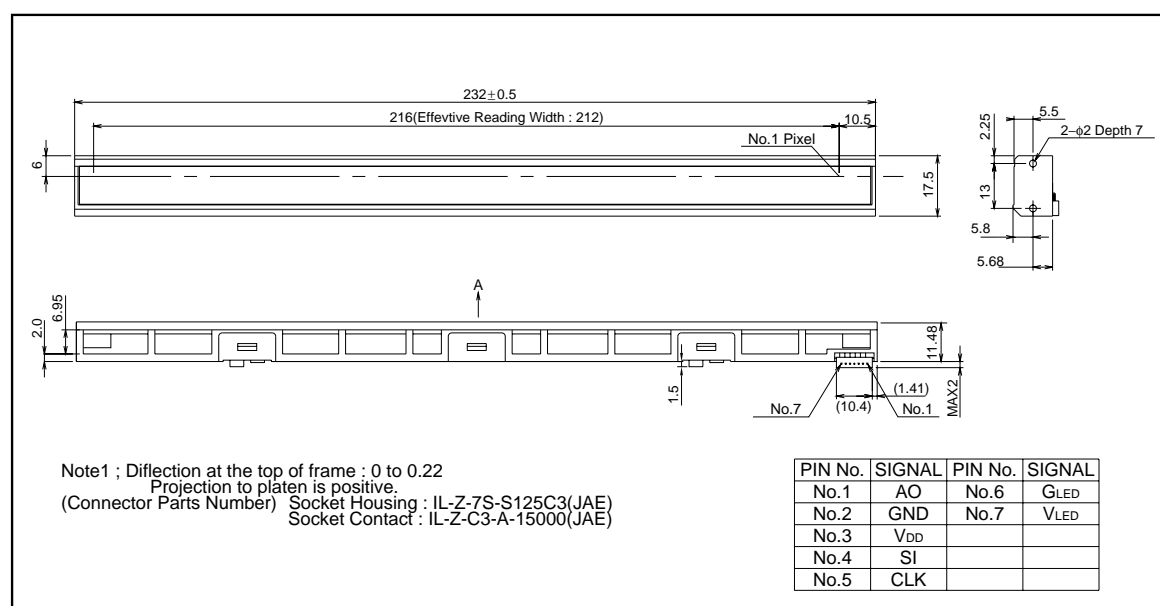
### ●Applications

Facsimiles, scanners, and a variety of other image input devices.

### ●Features

- 1) Signal amplifier is built in to the image sensor IC in order to increase immunity to external noise.
- 2) The LED light source is mounted on the same substrate as the sensor chip which makes it possible to package the device with lighter weight and an extremely small size.
- 3) 5 volts single power supply is needed for the CIS which will simplify the power supply requirement.
- 4) The ceramic substrate is used for excellent dimensional accuracy and thermal stability.
- 5) With the proprietary prism, the output signal is maintained uniformly.

### ●External dimensions (Unit : mm)



## Contact image sensor heads

## ●Characteristics

Parameter	Symbol	Typ.	Unit
Effective scanning width	–	212	mm
Primary scan dot density	–	203	dpi
Total dot number	–	1728	dots
Power supply voltage	V <sub>DD</sub>	5	V
Scanning speed	SLT	5	ms / line
Clock frequency	CLK	1	MHz
Maximum dynamic range	VRMax.	1.6	V
Minimum dynamic range	VRMin.	0.8	V
Dark output	V <sub>od</sub>	0.1±0.1	V
Operating temperature	–	5 to 45	°C

## ●Pin assignments

No.	Circuit	I / O	Functions
1	Ao	O	Analog output
2	GND	I	Ground
3	V <sub>DD</sub>	I	Power supply
4	SI	I	Serial-in
5	CLK	I	Clock
6	R-GND	I	LED ground
7	G-GND	I	LED power supply

Contact image sensor heads

●Timing chart

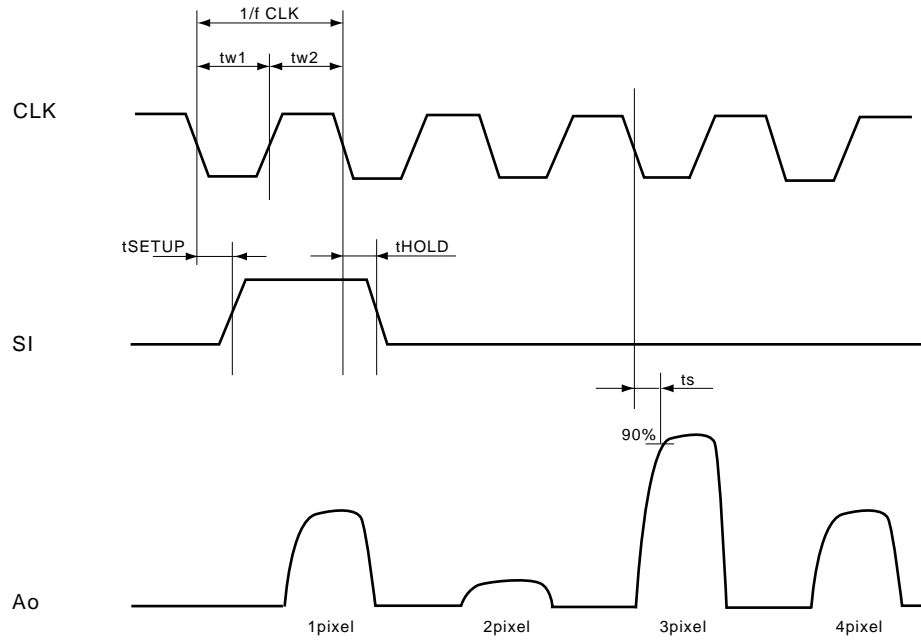


Fig.1

●Circuit diagram

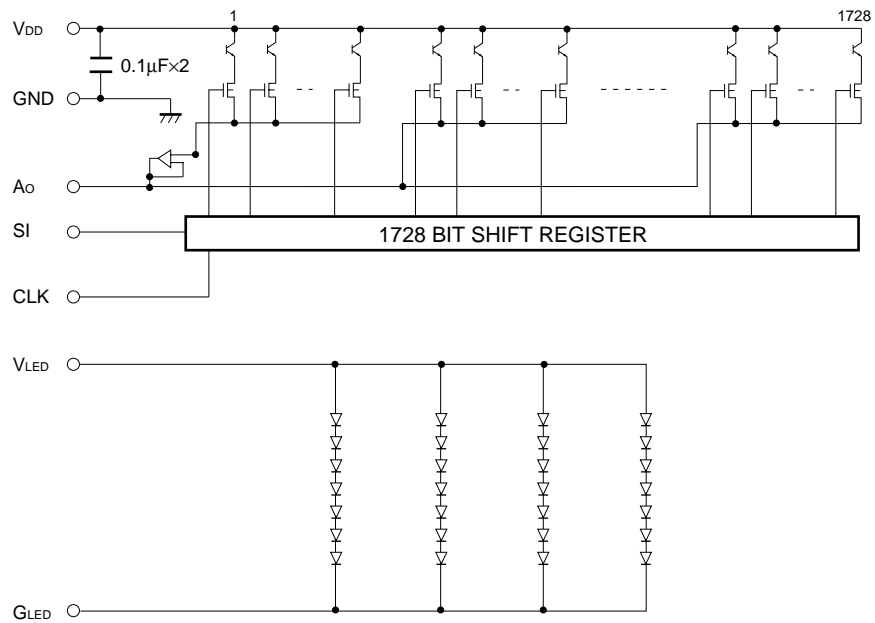


Fig.2

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