Monochrome image sensor head (8 pixel / mm)

IA2010–MB10A

The IA2010–MB10A is a state-of-the-art compact, lightweight image sensor head that resulted from the combination of ROHM's LSI circuit technology and thermal printhead mounting technology. The IA3008–MB10A is perfect for multi–function printers (MFP) or facsimiles that print on normal paper using laser units.

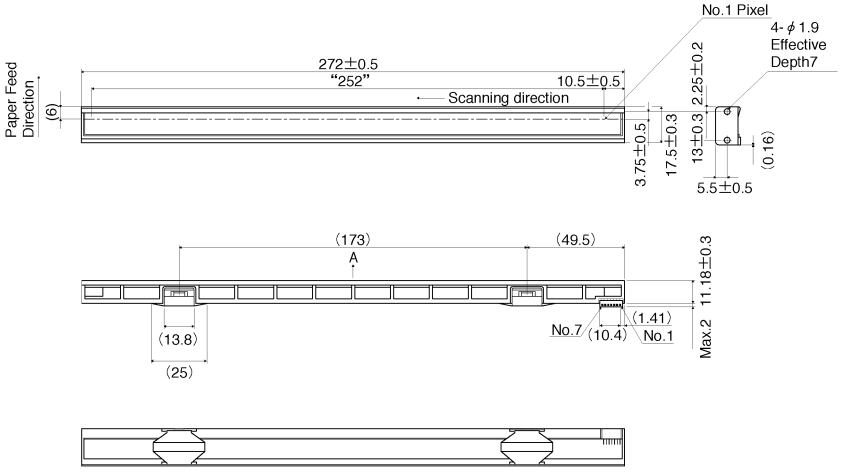
●Applications

Facsimiles
Image scanning devices

●Features

1) The amplifiers, resistors, capacitors, and other discrete components that were normally externally attached, are built into the sensor IC.
2) Compact body and lightweight achieved by the placement of the LED light source and sensor IC on the same board.
3) Uses a special ROHM developed prism that provides superior light gathering characteristics and uniform light dispersion.
4) Uses a ceramic board as the base board for minimal temperature fluctuations and uniform thermal dispersion.

●External dimensions (Units: mm)



PIN No.	SIGNAL
No.1	Ao
No.2	GND
No.3	V_{DD}
No.4	SI
No.5	CLK
No.6	GLED
No.7	VLED

Note: 1.Curvature of glass surface: With the A-direction positive, 0 to 0.22 with respect to the cover glass.
2.The frame material is UL94V-0.
(Connecter part number)
Socket Housing: IL-Z-7S-S125C3(JAE)
Socket Contact: IL-Z-C3-A-15000(JAE)

●Characteristics

Parameter	Symbol	Typ.	Unit
Effective scanning width	—	252	mm
Primary scan dot density	—	8	pixel / mm
Total dot number	—	2016	dots
Power supply voltage	V_{DD}	5	V
Scanning speed	SLT	5	ms / line
Clock frequency	CLK	500	kHz
Maximum dynamic range	VRMax.	1.6	V
Minimum dynamic range	VRMin.	0.84	V
Dark output	Vod	0～300	mV
Operating temperature	—	5～45	℃

●Pin assignments

No.	Circuit	I / O	Functions
1	Ao	O	Analog output
2	GND	I	Ground
3	V_{DD}	I	Power supply
4	SI	I	Serial-in
5	CLK	I	Clock
6	GLED	I	LED ground
7	VLED	I	LED power supply

●Timing chart

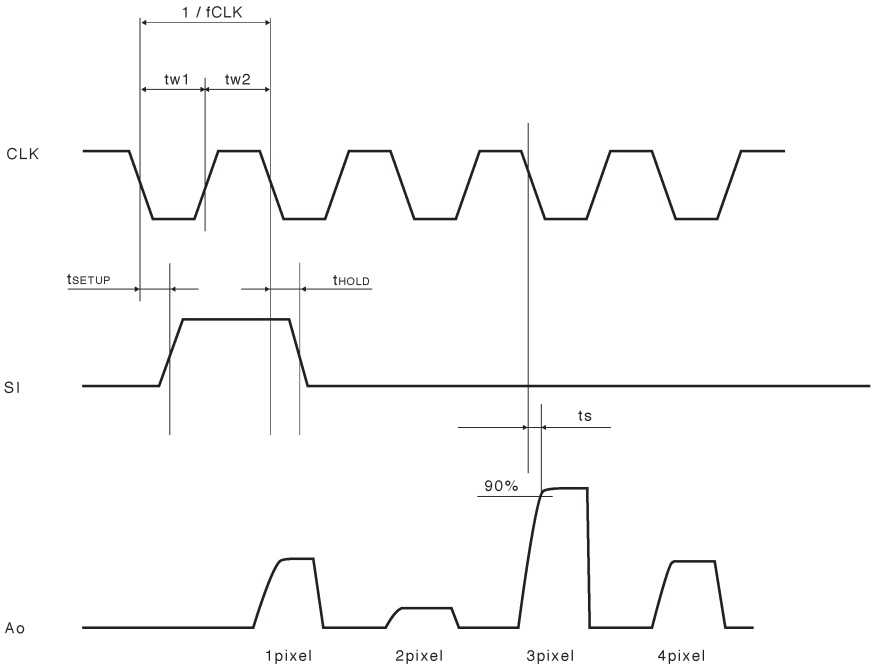


Fig.1

●Equivalent circuit

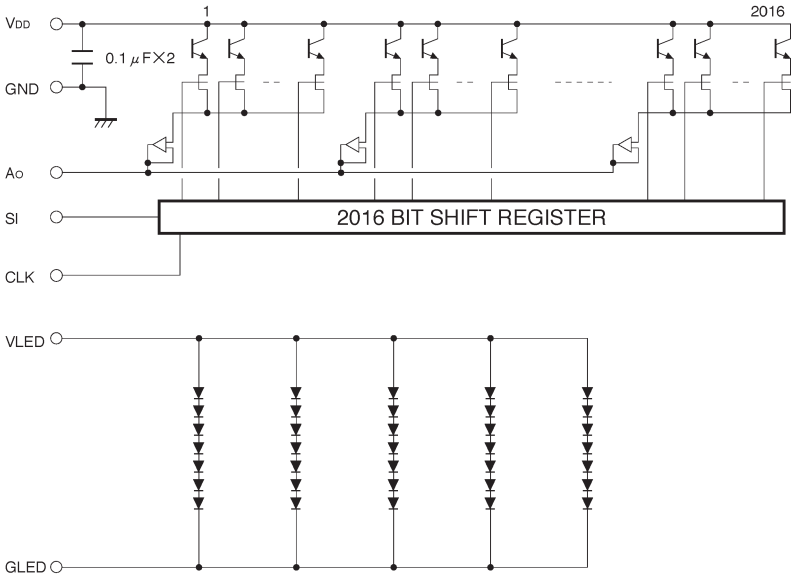


Fig.2