SHARP

Under development	
New product	●

GA202TXV2SZ OPIC Light Detector

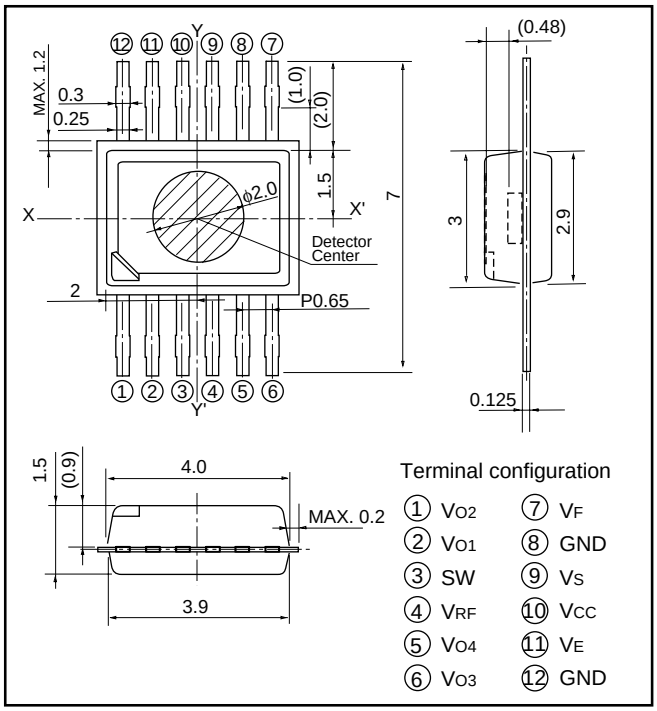
*OPIC Light Detector for Dual-wavelength Laser Diode

■ Features

(1) Suitable for Dual-wavelength laser diode
(2) Compact and thin package
(Package dimensions : 4.0 × 2.9 × 1.5mm)
(3) OPIC light detector
(Integrates 10-division PIN photodiode.IC onto a single chip)
DVD Player : 4× speed reading

■ Outline Dimensions

(Unit:mm)



* "OPIC" (Optical IC) is a trademark of SHARP Corporation.
An OPIC consists of a light-detecting element and a signal-processing circuit integrated onto a single chip.

■ Applications

(1) DVD Player

■ Specifications

(Ta=25˚C)

Parameter	Symbol	Characteristics	Condition
Supply voltage	Vcc	4.5 to 5.5 V	–
Output off-set voltage	Vod	± 25 mV	Vo1~Vo4, Vs base
Sensitivity	RP	TYP. 34.2 mV/μW	λ= 780 nm, Vo1~Vo4
		TYP. 29.1 mV/μW	λ= 650 nm, Vo1~Vo4
Response frequency	fc	MIN. 30 MHz	λ= 780 nm, Vo1~Vo4
		MIN. 40 MHz	λ= 650 nm, Vo1~Vo4
Maximum output amplitude	VOH	MIN. 3.8V	Vo1~Vo4
Output noise level	Vn	TYP. – 78 dBm	Vo1~Vo4, f=27 MHz,BW=30 kHz
Operating temperature	Topr	– 30 to + 80˚C	–

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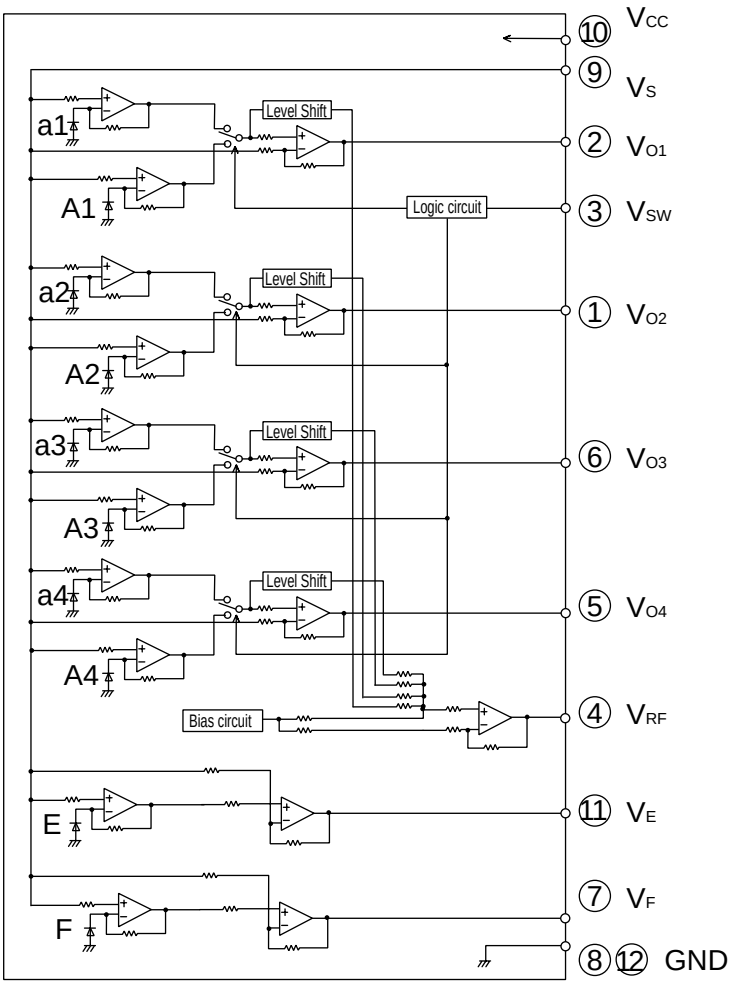
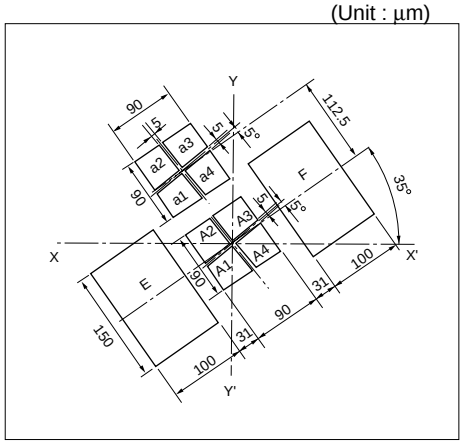
■ Internal Block Diagram



■ Detecting Pattern of Photodiode

(Unit : μm)



As of September, 2002

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  (i) The devices in this publication are designed for use in general electronic equipment designs such as:
  --- Personal computers
  --- Office automation equipment
  --- Telecommunication equipment [terminal]
  --- Test and measurement equipment
  --- Industrial control
  --- Audio visual equipment
  --- Consumer electronics

  (ii) Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:
  --- Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
  --- Traffic signals
  --- Gas leakage sensor breakers
  --- Alarm equipment
  --- Various safety devices, etc.

  (iii) SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:
  --- Space applications
  --- Telecommunication equipment [trunk lines]
  --- Nuclear power control equipment
  --- Medical and other life support equipment (e.g., scuba).

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