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# **SHARP**

Under development New product

# GP1FA511TZ/GP1FA511RZ Fiber Optic Trasmitter/Receiver

Shutter System Optic Transmitter/Receiver

#### **Features**

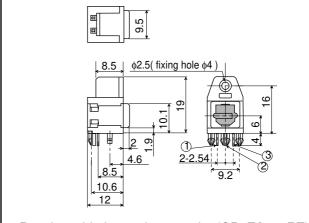
- (1)Shutter system unnecessary to remove the protection cap
- (2)Uni-directional data transmission using plastic fiber
- (3) The optical receiver can be directly connectable the TTL, due to the use of \*OPIC.
- \* "OPIC" (Optical IC) is a trademark of the SHARP Corporation. An OPIC consists of a light-detecting element and signal-processing circuit integrated onto a single chip.
- \*\* Sharp's GP1C331/GP1C331A/GP1C335 is recommended for optical fiber cable.

### Applications

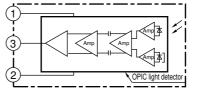
- (1) DVD players
- (2) CD players
- (3) MD players

#### Outline Dimensions

(Unit: mm)



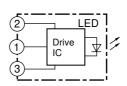
## Receiver side internal connection(GP1FA511RZ)



- 1) Vcc
- 2 GND

(3)Vout

Transmitting side internal connection(GP1FA511TZ)



- 1 Vin
- (2) Vcc
- (3) GND

## Specifications

 $(Ta=25^{\circ}C)$ 

Parameter	Symbol	GP1FA511TZ(transmitter)	GP1FA511RZ(receiver)
Supply voltage	Vcc	4.75 to 5.25 V	
Supply current	Icc	MAX. 10 mA	MAX. 40 mA
Output optical power couple into fiber	Pc	MIN. –21 dBm	Т
Receiver input optical power level	Pc	_	MIN. –24 dBm
Jitter	Δtj	TYP.1ns	
Operating transfer rate	T	MAX. 8 Mbps (NRZ signal,duty50%)	
Operating temperature	Topr	−20 to +70°C	

As of September, 2001

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    - --- Office automation equipment
    - --- Telecommunication equipment [terminal]
    - --- Test and measurement equipment
    - --- Industrial control
    - --- Audio visual equipment
    - --- Consumer electronics
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    - --- Traffic signals
    - --- Gas leakage sensor breakers
    - --- Alarm equipment
    - --- Various safety devices, etc.
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