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Sales & Marketing Group  
-Electronic Components & Devices

Model GA104T1M2MZ

# Front Monitor OPIC\* Light Detector for DVD Recording

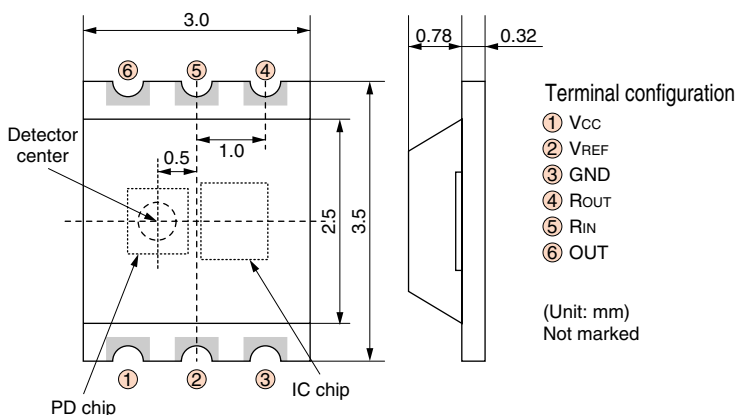
## Features

- Compatible with  $\times 8$  speed DVD writing and  $\times 48$  speed CD writing
- Improved temperature sensitivity characteristics due to two-chip configuration
- Sensitivity can be adjusted with an external resistor.
- Reflow soldering
- Compact package:  $3 \times 3.5$  mm

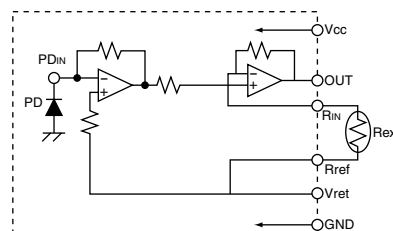
## Specifications

Parameter	Symbol	Characteristics	Condition
Supply voltage	$V_{CC}$	4.5 to 5.5 V	
Dissipation current	$I_{CC}$	TYP. 7 mA	
DC output voltage (sensitivity)	$R_p$	(TYP. $+3.2$ mV/ $\mu$ W)	$\lambda=650$ nm
Output offset voltage	$V_{OD}$	$\pm 15$ mV	
Settling time	$t_{SET}$	TYP. 20 ns	Output1 V $\rightarrow \pm 10$ mV
Rate of change in temperature sensitivity	$\Delta R_{p1}/R_{p1}$	+1 to +2.5 %	$\lambda=650$ nm, $+25$ °C $\rightarrow$ $0$ °C
	$\Delta R_{p2}/R_{p2}$	-5 to -2 %	$\lambda=650$ nm, $+25$ °C $\rightarrow$ $+75$ °C
Operating temperature	$T_{OPR}$	0 to $+75$ °C	
Reference voltage	$V_{REF}$	TYP. 2.1 V	

## Outline Dimensions (Unit: mm)

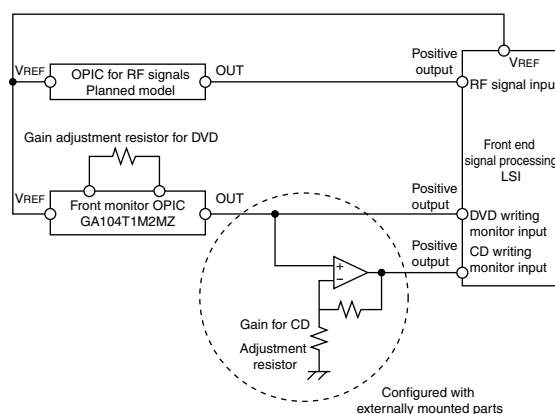
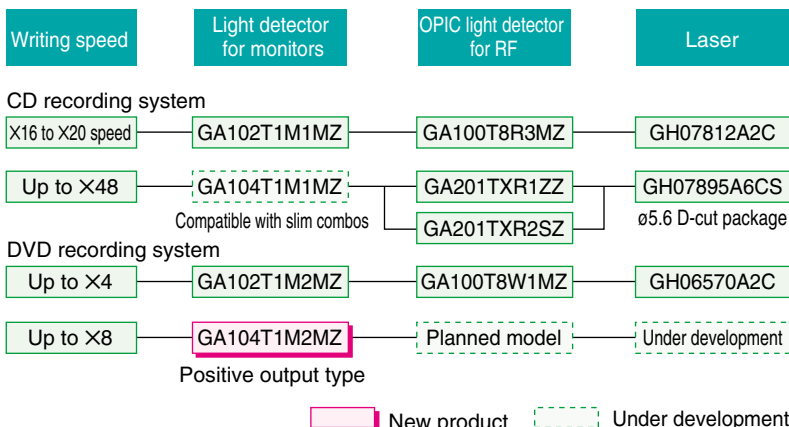


## Block Diagram



## Line-up

OPIC for front monitors



\* "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.

Notice:

In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP devices.

- Specifications, model names and availabilities are subject to change without notice for improvement.