

HUL7202

Hologram Unit

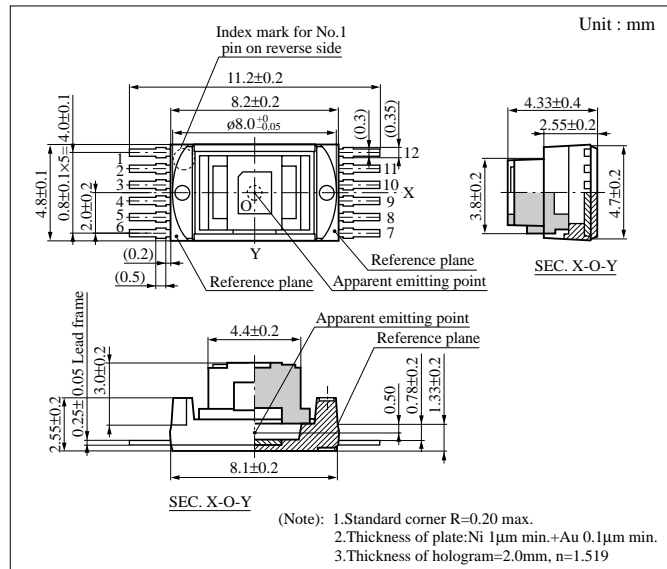
For optical information processing

Features

- Smaller package size achieved through micro-mirror integration
(4.8 × 8.2 × 4.3 mm)
- Built-in I-V conversion amp
- Focus error signal detection : SSD method
- Tracking error signal detection
: 3 beam method
- Low-power semiconductor laser included

Applications

- Car CD



Absolute Maximum Ratings (Ta = 25°C)

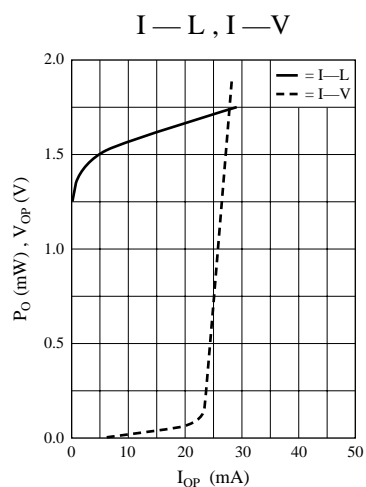
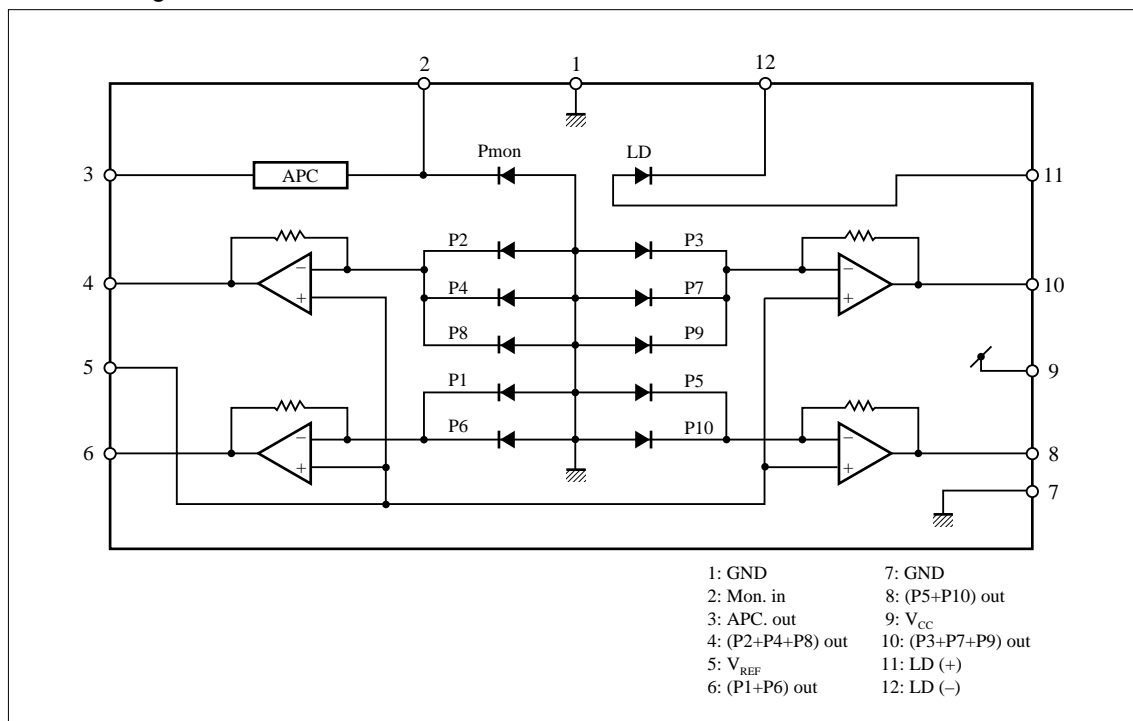
Parameter	Symbol	Ratings	Unit
Laser beam output*1	P _O	0.3	mW
Reverse voltage	Laser	V _{R(LD)}	2
	Monitor	V _{R(mon)}	6
Supply voltage	V _R	6	V
Operating ambient temperature	T _{opr}	-10 to +70	°C
Storage temperature	T _{stg}	-40 to +85	°C

*1 Equivalent to optical output of 5 mW at laser edge

Electro-Optical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Laser beam output	P _O	CW		0.18	0.25	mW
Operating current	I _{OP}	CW V _{RF} = 420mV, V _{CC} = 5V	23	35	40	mA
Operating voltage	V _{OP}	CW V _{RF} = 420mV, V _{CC} = 5V		1.9	2.4	V
Oscillating wavelength	λ _L	CW V _{RF} = 420mV, V _{CC} = 5V	785	800	815	nm
Focus error signal amplitude	V _{FE}	CW V _{RF} = 420mV, V _{CC} = 5V	180	300	420	mV
Tracking error signal amplitude	V _{TE}	CW V _{RF} = 420mV, V _{CC} = 5V	170	280	390	mV
Focus error signal pull-in range	D _{FE}	CW V _{RF} = 420mV, V _{CC} = 5V	9	12	16	μm
Frequency characteristics (-3 dB)	f _C		6	9		MHz

■ Block Diagram of Circuit Functions



Caution for Safety

 **DANGER**

■ Gallium arsenide material (GaAs) is used in this product.

Therefore, do not burn, destroy, cut, crush, or chemically decompose the product, since gallium arsenide material in powder or vapor form is harmful to human health.

Observe the relevant laws and regulations when disposing of the products. Do not mix them with ordinary industrial waste or household refuse when disposing of GaAs-containing products.

■ Do not touch or look at a laser beam directly.

It is in danger of a injury to eyesight or outer skin in the worst case.

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