

# HUL7202

## Hologram Unit

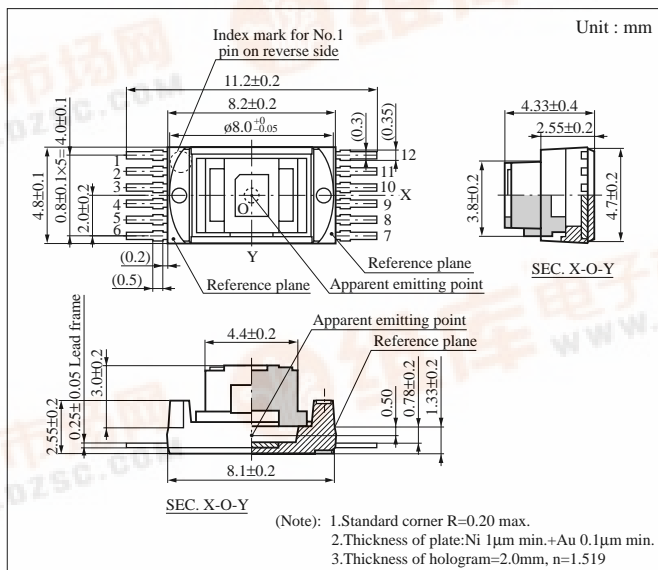
For optical information processing

### 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 <sub>O</sub>	0.3	mW
Reverse voltage	Laser	V <sub>R(LD)</sub>	2 V
	Monitor	V <sub>R(mon)</sub>	6 V
Supply voltage	V <sub>R</sub>	6	V
Operating ambient temperature	T <sub>opr</sub>	-10 to +70	°C
Storage temperature	T <sub>stg</sub>	-40 to +85	°C

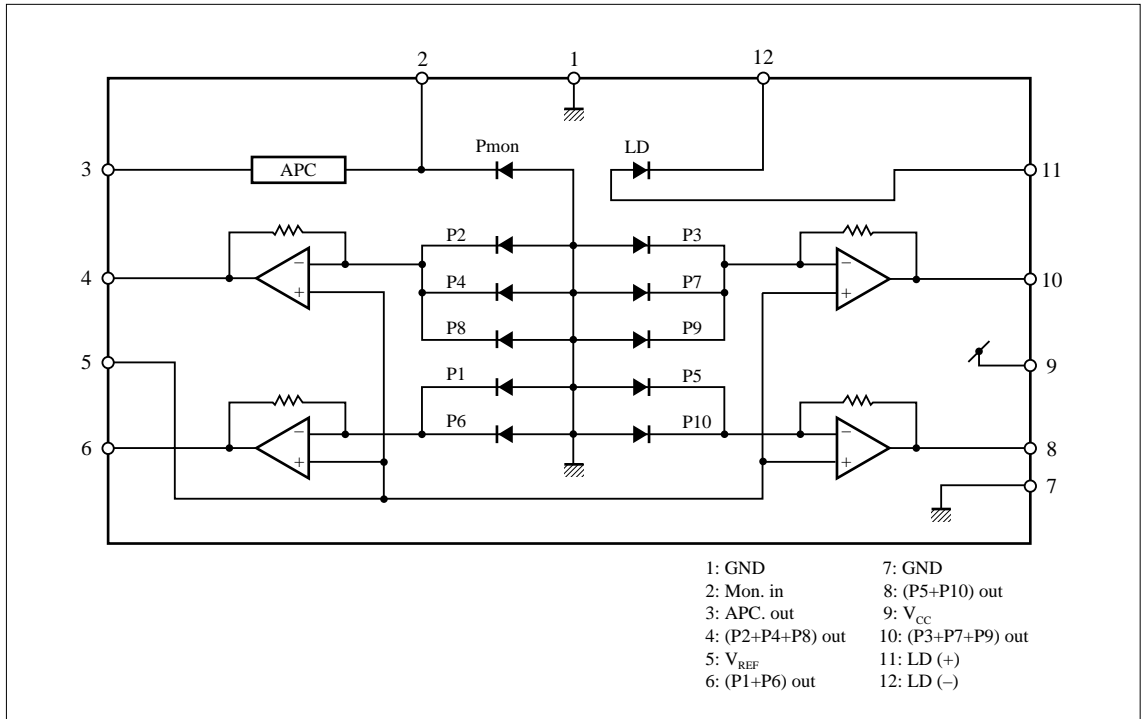
\*1 Equivalent to optical output of 5 mW at laser edge

### Electro-Optical Characteristics (Ta = 25°C)

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



■ Block Diagram of Circuit Functions



I — L, I — V

