

Specifications

HUL6272

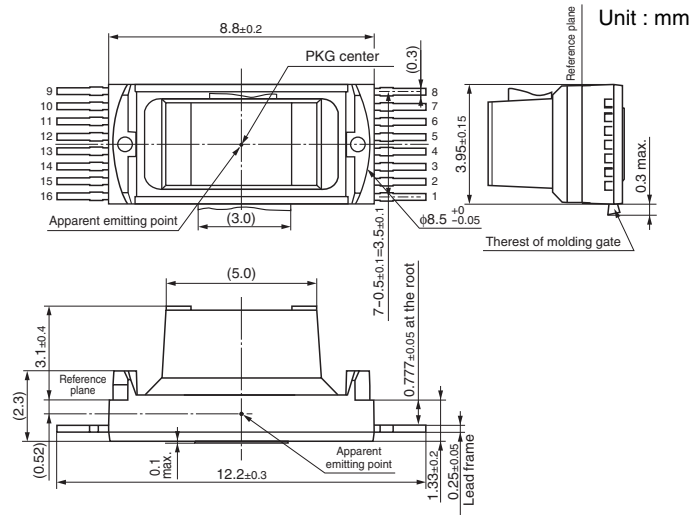
For DVD/DVD-ROM Drives

Features

- General-purpose optical design independent of objective lens
- Applicable to high-speed 8 × readout
- High noise immunity due to built-in differential summation amplifier
- Thin (4.0 mm) package realizes thin and simple DVD pick-up

Error Signal Detection Method

- Focus error signal detection: SSD method
- Tracking error signal detection: Phase differential method



Note) 1. Standard corner R = 0.20 max.
2. Thickness of hologram optical element = 2.5 mm, Refractive index = 1.519

LDHU06

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Ratings	Unit
Laser beam output	P_O	5	mW
Laser reverse voltage	$V_{R(LD)}$	1.5	V
Supply voltage	V_{CC}	6	V
Reference voltage	V_{ref}	+2.1 to +2.3	V
Operating ambient temperature	T_{opr}	-10 to +60	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +85	$^\circ\text{C}$

Unit Characteristic Specifications $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Threshold current	I_{th}	CW	15	25	40	mA
Operating current	I_{OP}	CW, $V_{RF} = 1\text{V}$, $V_{CC} = 5\text{V}$	20	35	60	mA
Operating voltage	V_{OP}		1.9	2.3	2.7	V
Oscillation wavelength	λ		655	662	668	nm
Optical output from lens	P_O		—	0.25	0.35	mW
Focus error signal amplitude	V_{FE}	$V_{RF} = 1\text{V}$, $V_{CC} = 5\text{V}$, $V_{ref} = 2.2\text{V}$	240	360	480	mV
Focus error signal balance	B_{FE}		-15	0	+15	%
Radial optical flux balance	RAB		-20	0	+20	%
Tangential optical flux balance	TAB		-20	0	+20	%
Jitter	Jitter		—	8.0	—	ns