

# Specifications

## HUL7251

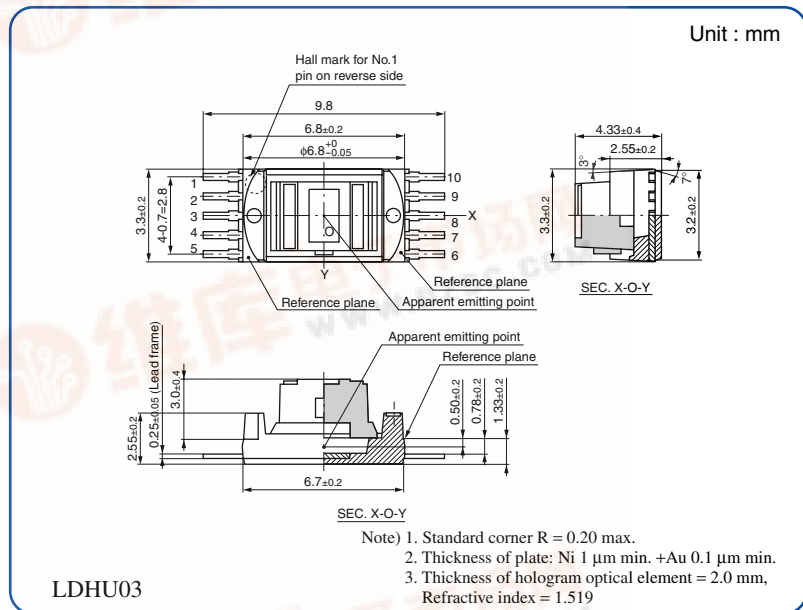
For Slim CD-ROM Drives (20 × to 24 × readout)

### Features

- Low profile package size achieved through micro-mirror integration (3.3 mm × 6.8 mm × 4.3 mm)
- Low power consumption semiconductor laser
- Low profile package suited for slim note PCs.
- Built-in I-V conversion amp.

### Error Signal Detection Method

- Focus error signal detection: SSD method
- Tracking error signal detection: 3-beam method



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

Parameter	Symbol	Ratings	Unit
Laser beam output	$P_O$	3.6	mW
Laser reverse voltage	$V_{R(LD)}$	2	V
Supply voltage	$V_{CC}$	6	V
Reference voltage	$V_{ref}$	+1.3 to $V_{CC} - 1.3$	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	20	30	40	mA
Operating current	$I_{OP}$	CW, $V_{RF} = 570 \text{ mV}$ , $V_{CC} = 5 \text{ V}$	25	35	45	mA
Operating voltage	$V_{OP}$		—	1.9	2.4	V
Focus error signal amplitude	$V_{FE}$	$V_{RF} = 570 \text{ mV}$ , $V_{CC} = 5 \text{ V}$	340	480	620	mV
Tracking error signal amplitude	$V_{TE}$		150	300	450	mV
Focus error signal defocusing	$D_{FO}$		-8	0	+8	%
Tracking error signal balance	$B_{TE}$		-30	0	+30	%
Jitter	Jitter		—	—	6	ns