

# HUL6273

## For Car DVD Player Hologram Unit

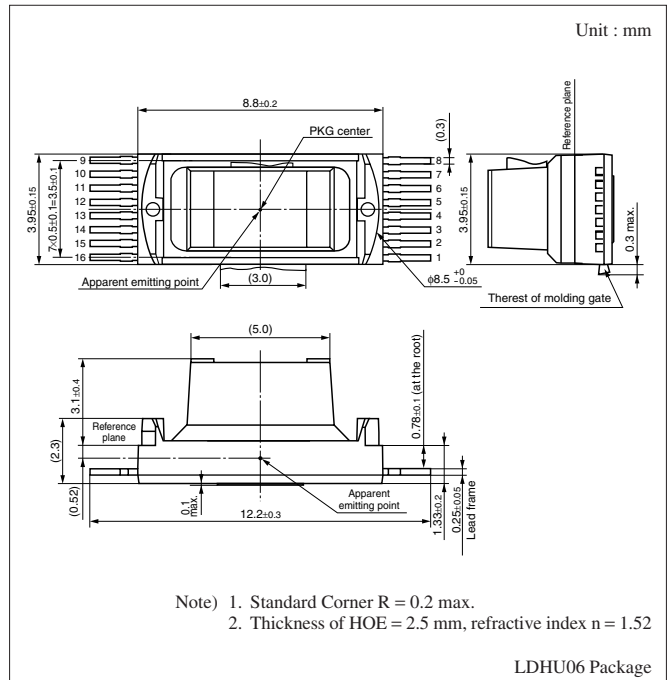
For optical information processing  
(Readable  $\times 6$  speed)

### ■ Features

- General-purpose optical design independent of objective lens
- Applicable to high-speed  $6 \times$  readout
- With the supplementary amplifier of the bipolarity built-in, the noise characteristic can be born highly
- Thin (4.0 mm) package realizes thin and simple DVD pick-up

### ■ Applications

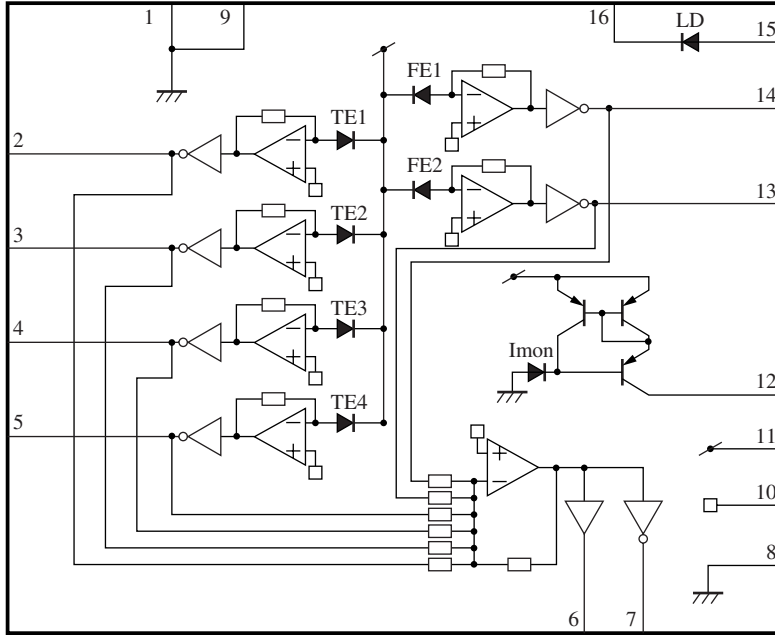
- Car DVD player



### ■ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Radiant power	$P_O$	5	mW
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 +70	°C
Storage temperature	$T_{stg}$	-40 to +85	°C

■ Block Diagram



■ Pin Descriptions

Pin No.	Description	Pin No.	Description
1	GND	9	GND
2	TE1 Signal out	10	V <sub>ref</sub>
3	TE2 Signal out	11	V <sub>CC</sub>
4	TE3 Signal out	12	I <sub>mon</sub>
5	TE4 Signal out	13	FE2 Signal out
6	REP Signal out	14	FE1 Signal out
7	RFN Signal out	15	LD(+)
8	GND	16	LD(-)

■ Electro-Optical Characteristics

• Unit characteristic specifications  $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$ ,  $V_{RF} = V_{REP} - V_{RFN}$

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	$\lambda$	$V_{RF} = 1\text{ V}$ , $V_{CC} = 5\text{ V}$ , $V_{ref} = 2.2\text{ V}$	658	668	678	nm
Optical output from lens	$P_O$		—	0.2	0.3	mW
Focus error signal amplitude	$V_{FE}$		240	360	480	mV
Focus error signal balance	$B_{FE}$		-15	—	+15	%
Radial optical flux balance	RAB		-20	0	+20	%
Tangential optical flux balance	TAB		-20	0	+20	%
Jitter	Jitter		—	8.0	0	%

# Caution for Safety

 **DANGER**

■ **This product contains Gallium Arsenide (GaAs).**

GaAs powder and vapor are hazardous to human health if inhaled or ingested. Do not burn, destroy, cut, cleave off, or chemically dissolve the product. Follow related laws and ordinances for disposal. The product should be excluded from general industrial waste or household garbage.

■ **Do not touch or look into the laser beam directly.**

The laser beam may cause injury to the eye or skin, or loss of eyesight.

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