

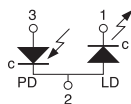
All laser diodes are extremely electrostatic sensitive; see page 1244 for our selection of antistatic products.



## $\lambda = 638 \text{ nm}$ , $P = 40 \text{ mW}$ , Single Mode Sanyo DL6148-030



**Pin Description**  
 1 laser cathode  
 2 common case  
 3 monitor diode anode



PIN CODE 5A

- $\varnothing 5.6 \text{ mm}$  Package
- 60 mA (Typ.) Threshold Current
- Single Longitudinal Mode
- 2:1 Aspect Ratio (Typ.)

ITEM#	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
DL6148-030	£ 164.20	€ 211,80	¥ 2,007.90

\*For quantities over 5 pieces, please call our local office for pricing.

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL6148-030	\$ 237.90	\$ 214.11	\$ 190.32	Sanyo 638 nm, 40 mW

### Maximum Ratings ( $T_c = 25^\circ \text{C}$ )

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	$P_o$	40 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operation Case Temperature	$T_c$	-10 to 50 °C
Storage Temperature	$T_{stg}$	-40 to 85 °C

### Characteristics ( $T_c = 25^\circ \text{C}$ , $P = 40 \text{ mW}$ )

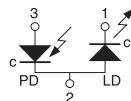
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	$I_{th}$	–	60 mA	85 mA
Operation Current	$I_{op}$	–	100 mA	130 mA
Operation Voltage	$V_{op}$	–	2.4 V	2.7 V
Lasing Wavelength	$\lambda_p$	635 nm	638 nm	645 nm
Beam Divergence (FWHM)	$\theta_{//}$	6.5°	8.5°	12°
	$\theta_{\perp}$	12°	16°	22°
Monitor Current	$I_m$	0.3 mA	0.6 mA	0.9 mA

Note: All data is presented as typical unless otherwise specified.

## $\lambda = 650 \text{ nm}$ , $P = 5 \text{ mW}$ , Single Mode Sanyo DL3147-060



**Pin Description**  
 1 laser cathode  
 2 common case  
 3 monitor diode anode



PIN CODE 5A

- $\varnothing 5.6 \text{ mm}$  Package
- 20 mA (Typ.) Threshold Current
- Operating Temperature of 70 °C at 5 mW
- TE Mode

ITEM#	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
DL3147-060	£ 7.80	€ 10,06	¥ 95.38

\*For quantities over 5 pieces, please call a local office for pricing.

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL3147-060	\$ 11.30	\$ 9.95	\$ 7.58	Sanyo 650 nm, 5 mW

### Absolute Maximum Ratings ( $T_c = 25^\circ \text{C}$ )

CHARACTERISTIC	SYMBOL	RATING
Optical Power Output (CW)	$P_o$	7 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operating Temperature	$T_{op}$	-10 to 70 °C
Storage Temperature	$T_{stg}$	-40 to 85 °C

### Characteristics ( $T_c = 25^\circ \text{C}$ , $P = 5 \text{ mW}$ )

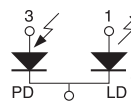
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	$I_{th}$	–	20 mA	35 mA
Operation Current	$I_{op}$	–	30 mA	45 mA
Operation Voltage	$V_{op}$	–	2.3 V	2.6 V
Lasing Wavelength	$\lambda_p$	645 nm	650 nm	660 nm
Beam Divergence (FWHM)	$\theta_{//}$	7°	8°	10°
	$\theta_{\perp}$	25°	30°	35°
Monitor Current	$I_m$	0.08 mA	0.2 mA	0.4 mA
Astigmatism	$A_s$	–	8 $\mu\text{m}$	–

Note: All data is presented as typical unless otherwise specified.

## $\lambda = 654 \text{ nm}$ , $P = 10 \text{ mW}$ , Single Mode Sharp GH06510B2A



**Pin Description**  
 1 laser anode  
 2 common case  
 3 monitor diode anode



PIN CODE 5B

- $\varnothing 5.6 \text{ mm}$  Package
- 40 mA (Typ.) Low Current Drive
- 10 mW Maximum Optical Power Output (CW)
- 70 °C (Max) Operating Temperature

ITEM#	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
GH06510B2A	£ 14.84	€ 19,14	¥ 181.46

\*For quantities over 5 pieces, please call a local office for pricing.

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
GH06510B2A	\$ 21.50	\$ 20.43	\$ 17.20	Sharp 654 nm, 10 mW

### Absolute Maximum Ratings ( $T_c = 25^\circ \text{C}$ )

CHARACTERISTIC	SYMBOL	RATING
Optical Power Output	$P_o$	10 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operation Case Temperature	$T_c$	-10 to 70 °C
Storage Temperature	$T_{stg}$	-40 to 85 °C
Soldering Temperature	$T_{sld}$	260 °C

### Characteristics ( $T_c = 25^\circ \text{C}$ , $P = 7 \text{ mW}$ )

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	$I_{th}$	–	30 mA	45 mA
Operation Current	$I_{op}$	–	40 mA	55 mA
Operation Voltage	$V_{op}$	–	2.2 V	2.5 V
Lasing Wavelength	$\lambda_p$	640 nm	654 nm	660 nm
Divergence Parallel	$\theta_{//}$	7°	8.5°	10°
Divergence Perpendicular	$\theta_{\perp}$	24°	29°	33°
Monitor Current	$I_m$	0.08 mA	0.2 mA	0.4 mA

Note: All data is presented as typical unless otherwise specified.