

CHAPTERS

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SourcesQuantum
Electronics

Drivers/Mounts

Accessories

SECTIONS

Laser Diodes

Pigtailed Diodes

Fiber-Coupled
Laser SourcesWDM Laser
Sources

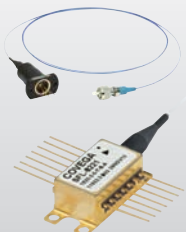
HeNe Lasers

Laser Diode
Modules

Tunable Lasers

Femtosecond
Lasers

Optical Amplifiers

1550 nm
Pigtailed
Laser Diodes

Available with SM
or PM Fiber or in
a 14-Pin Butterfly
Package with SM
or PM Fiber

See pages XXX
and XXX

For current pricing,
please see our website.

Specs updated
9-10-14 - LF

$\lambda = 1310 \text{ nm}$ $P = 5 \text{ mW}$, Single Mode Mitsubishi ML725B8F

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

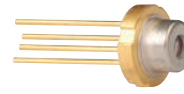
CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_o	10 mW*
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	20 V
Operation Case Temperature	T_c	-40 to +85 °C
Storage Temperature	T_{stg}	-40 to +100 °C

*5 mW Typical

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

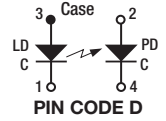
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	1290 nm	1310 nm	1330 nm
Threshold Current	I_{th}	—	5 mA	15 mA
Operation Current	I_{op}	—	20 mA	35 mA
Operation Voltage	V_{op}	—	1.1 V	1.5 V
Beam Divergence (FWHM)	$\theta_{//}$	—	25°	—
	$\theta_{\perp}$	—	30°	—
Slope Efficiency	η_s	0.3 mW/mA	0.5 mW/mA	—
Monitor Current	I_m	0.1 mA	0.5 mA	—

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

CAUTION:
ELECTROSTATIC
SENSITIVE

Pin Description

- 1 laser cathode
- 2 monitor diode anode
- 3 case/laser anode
- 4 monitor diode cathode



- Ø5.6 mm Package
- Single Transverse Mode
- InGaAsP MQW Fabry-Perot Structure

ITEM #	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
ML725B8F	£ 62.79	€ 75.87	¥ 694.99

*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
ML725B8F	\$ 87.20	\$ 81.10	\$ 76.74	Mitsubishi 1310 nm, 10 mW

$\lambda = 1550 \text{ nm}$, $P = 5 \text{ mW}$, Single Mode Mitsubishi ML925B45F

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

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	P_o	6 mW*
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	20 V
Operation Case Temperature	T_c	-40 to 85 °C
Storage Temperature	T_{stg}	-40 to 100 °C

*5 mW Typical

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

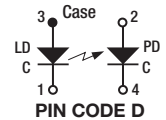
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	1520 nm	1550 nm	1580 nm
Threshold Current	I_{th}	3 mA	10 mA	20 mA
Operation Current	I_{op}	10 mA	30 mA	50 mA
Operation Voltage	V_{op}	—	1.1 V	1.5 V
Beam Divergence (FWHM)	$\theta_{//}$	—	25°	—
	$\theta_{\perp}$	—	30°	—
Slope Efficiency	η_s	0.15 mW/mA	0.25 mW/mA	0.5 mW/mA
Monitor Current	I_m	0.1 mA	0.5 mA	1 mA

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

CAUTION:
ELECTROSTATIC
SENSITIVE

Pin Description

- 1 laser cathode
- 2 monitor diode anode
- 3 case/laser anode
- 4 monitor diode cathode



- Ø5.6 mm Package
- MQW Active Layer
- 10 mA (Typ.) Threshold Current
- 30 mA (Typ.) Operating Current

ITEM #	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
ML925B45F	£ 34.13	€ 41.24	¥ 377.78

*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
ML925B45F	\$ 47.40	\$ 45.98	\$ 45.03	Mitsubishi 1550 nm, 5 mW

$\lambda = 1550 \text{ nm}$, $P = 5 \text{ mW}$ DFB, Mitsubishi ML925B11F

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

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	P_o	10 mW*
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	20 V
Operation Case Temperature	T_c	-40 to 85 °C
Storage Temperature	T_{stg}	-40 to 100 °C

*5 mW Typical

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

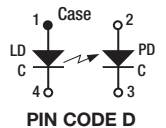
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	1530 nm	1550 nm	1570 nm
Threshold Current	I_{th}	—	8 mA	15 mA
Operating Current	I_{op}	—	25 mA	40 mA
Operating Voltage	V_{op}	—	1.1 V	1.5 V
Beam Divergence (FWHM)	$\theta_{//}$	—	25°	35°
	$\theta_{\perp}$	—	35°	45°
Slope Efficiency	η_s	0.2 mW/mA	0.28 mW/mA	—
Monitor Current	I_m	0.05 mA	0.2 mA	—

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

CAUTION:
ELECTROSTATIC
SENSITIVE

Pin Description

- 1 case/laser anode
- 2 monitor diode anode
- 3 monitor diode cathode
- 4 laser cathode



- Ø5.6 mm Package
- InGaAsP MQW, DFB (Multiple Quantum Well Distributed Feedback) Structure
- Fast Response Time (0.1 ns Typical Risettime, 0.2 ns Maximum Falltime)
- Side Mode Suppression Ratio 40 dB (Typ.) (35 dB Min) @ 5 mW

ITEM #	£* 1-5 PCS	€* 1-5 PCS	RMB* 1-5 PCS
ML925B11F	£ 184.68	€ 223.16	¥ 2,044.31

*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
ML925B11F	\$ 256.50	\$ 218.03	\$ 192.38	Mitsubishi 1550 nm, 10 mW