

		SDLO-WM21 -270	SDLO-WM41 -500		
		2 pump source	4 pump source		
Absolute Maximum Ratings				Unit	Conditions/Comments
Operating Current ⁽³⁾	MAX	350	350	mA	CW
Laser Diode Reverse Voltage	MAX	4.5	4.5	V	
MPD Reverse Voltage	MAX	10	10	V	
Operating Case Temp. Range	MIN	-5	-5	°C	
	MAX	+65	+65	°C	
Storage Temperature Range	MIN	-40	-40	°C	
	MAX	+85	+85	°C	
Operating Characteristics				Unit	Conditions/Comments
Kink Free Power ⁽¹⁾⁽²⁾	MAX	270	500	mW	
Operating Power ⁽¹⁾⁽²⁾	MIN	240	450	mW	
Operating Current ⁽¹⁾⁽³⁾	MAX	290	290	mA	
Threshold Current ⁽¹⁾⁽³⁾	MAX	25	25	mA	
Laser Diode Fwd Voltage ⁽¹⁾⁽³⁾	MAX	2.5	2.5	V	I _{Op}
Optical Power Stability	MAX	0.5	0.5	% of P _f	I _{Op} , t = 60 seconds
Center Wavelength	MIN	974	969	nm	I _{Op}
	MAX	986	986	nm	I _{Op}
Spectral Shift w/Temperature	MAX	0.02	0.02	nm/°C	I _{Op}
Spectrum Stability ⁽³⁾	MAX	0.1	0.1	nm	I _{Op} , t = 60 seconds T _{case} = Constant
Monitor Photodiode Current ⁽¹⁾⁽³⁾	MIN	100	100	μA	I _{Op}
Thermistor Resistance ⁽³⁾	MIN	9.5	9.5	KΩ	T _{laser} = 25°C
	MAX	10.5	10.5	KΩ	
TEC Voltage ⁽³⁾	MAX	2.5	2.5	V	ΔT = 45°C, I _{Op}
TEC Current ⁽³⁾	MAX	1.5	1.5	A	ΔT = 45°C, I _{Op}

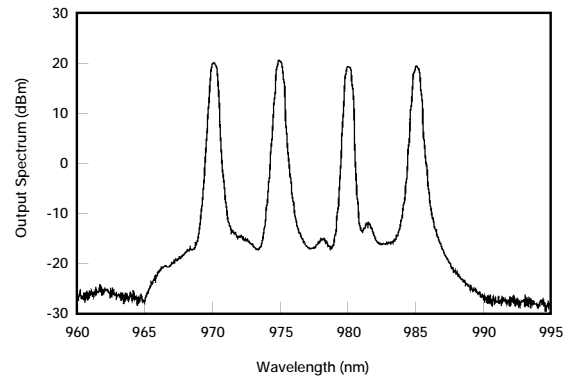
Fiber Pigtail Specifications

Type	SM
Mode-field Diameter	5.9 ± 0.5 μm
Cladding Diameter	125 ± 2 μm
Jacket Diameter	900 μm

Notes

1. All measurements taken with back-reflection less than -50dB.
2. Sum of optical powers at 975 nm and 980 nm exceeds 50% of rated output power.
3. Each module (SDLO-25xx Series).

Typical Output Power Spectrum



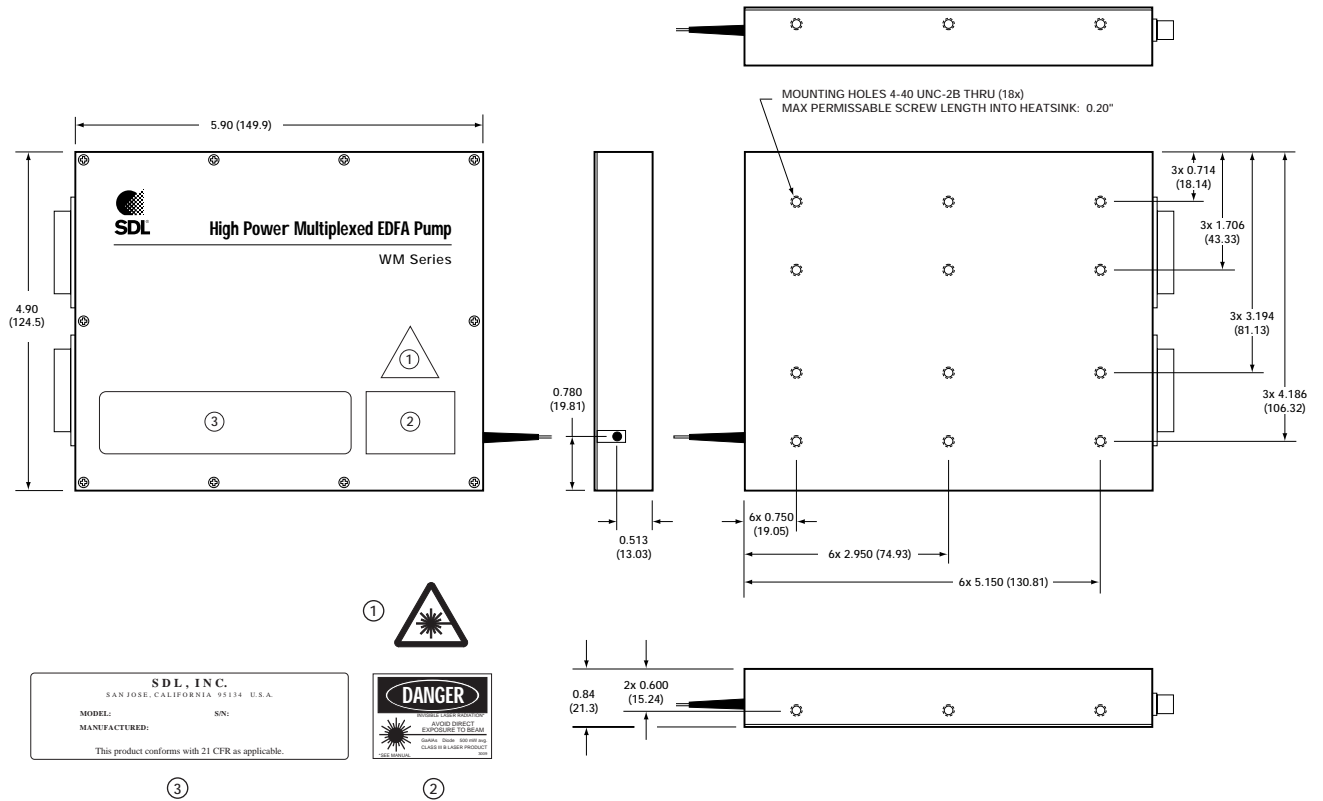
Package Specifications & Schematic Diagram

Dimensions in inches (mm) except where indicated

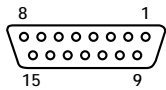
Standard Tolerances

inches: x.xx = ±0.02
x.xxx = ±0.010

mm: x.x = ±0.5
x.xx = ±0.25



2x female DB-15 pin electrical connector

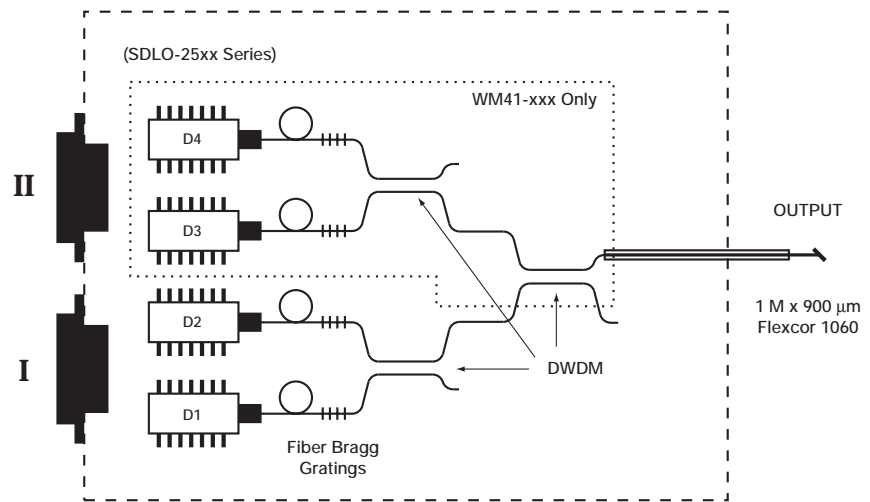


Pin-Out For Connector I and (II)

1	TEC-	D1	(D3)
2	Thermistor	D1	(D3)
3	Thermistor	D1	(D3)
4	TEC+	D1	(D3)
5	TEC-	D2	(D4)
6	LD Cathode	D2	(D4)
7	MPD Anode	D2	(D4)
8	TEC+	D2	(D4)
9	LD Cathode	D1	(D3)
10	MPD Anode	D1	(D3)
11	GND		
12	GND		
13	GND		
14	Thermistor	D2	(D4)
15	Thermistor	D2	(D4)

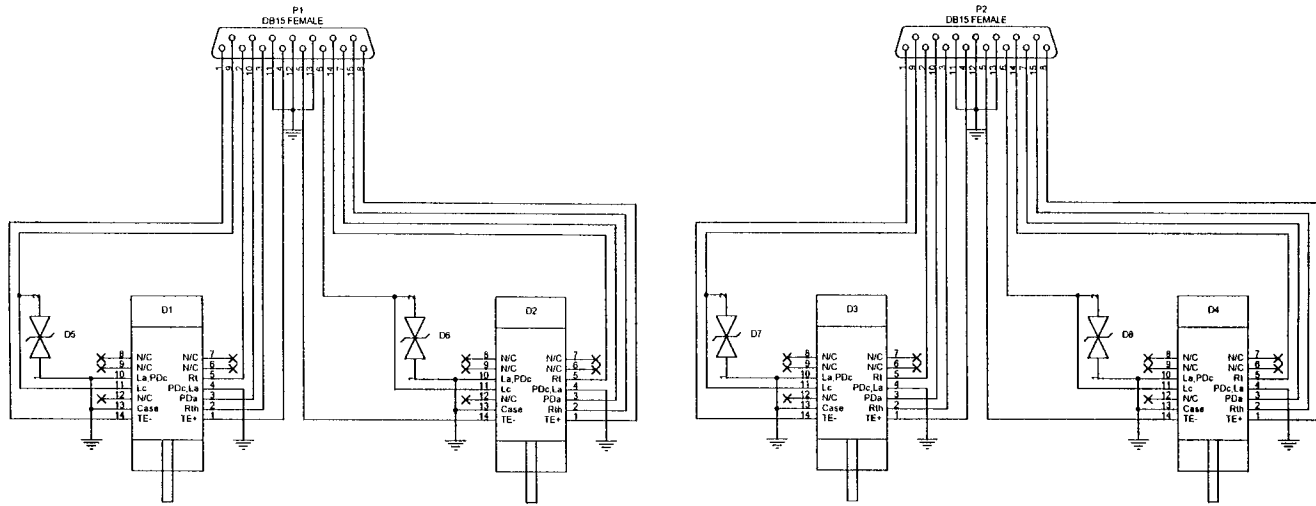
Note: LD Anode and MPD Cathode are grounded internally

WM21/41 Functional Schematic



D1-D4 will be specified by wavelength in test data

Electrical Schematic



User Safety

Safety and Operating Considerations

The laser light emitted from this laser system is invisible and will be harmful to the human eye. Proper laser safety eyewear must be worn during operation.

Device degradation accelerates with increased temperature and therefore careful attention to minimize the case temperature is advised.

CAUTION: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



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