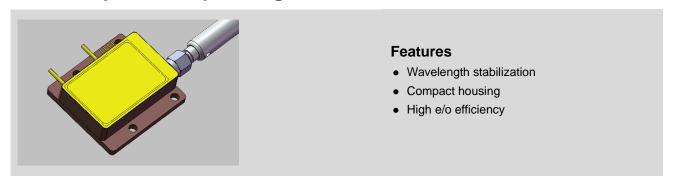
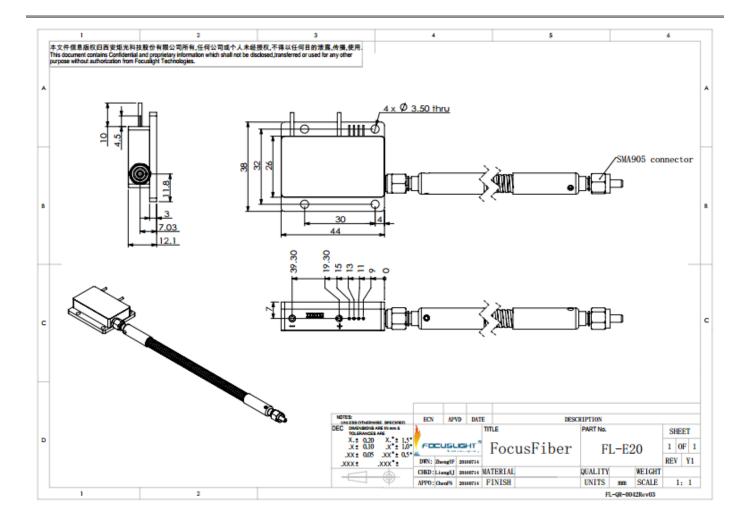
FocusFiber®

Fiber Coupled Multiple Single Emitter







Specification

Module Type ¹	Units	FL-E20-981- 200-0.22-A	FL-E20-981- 200-0.22-B	FL-E15-981- 200-0.22	FL-E15-976- 200-0.22	FL-E7.5-981- 200-0.22					
Optical ^{3,7}											
Center Wavelength λ	nm	981	981	981	976	981					
Wavelength Tolerand	nm	±1	±1	±1	±1	±0.6					
Output Power ²	W	20	20	15	15	7.5					
Spectral Width FWH	\ nm	1	1	1	1	1					
Wavelength Temperature drift	nm/℃	0.01	0.01	0.01	0.01	0.01					
Spectral Efficiency	%	>99% @ 20W @ 25°C	>90% @ 20W @ 28°C	>90% @ 15W @ 25°C	>99% @ 15W @ 25°C	>99% @ 7.5W @ 25°C					
Extra Measurement Spectral Efficiency	%	>99% @ 15W @ 20-30 °C				>99% @ 15W @ 20-30°C					
Polarization						>95% in p-pol.					
Lifetime						>20.000h					
Fiber Parameters											
Fiber Numerical Aper	[†] NA	0.22	0.22	0.22	0.22	0.22					
Fiber Core Diameter	μm	200	200	200	200	200					
Connector Type	-	SMA905	SMA905	SMA905	SMA905	SMA905					
Fiber Length	m	Selectable	0.052	0.052	Selectable	0.052					
Fiber alignment						<1% power loss in p-pol					
Electrical Parameters											
Max.operation current start of life	Α	9	9	8	8	6					
Max.operation current end of life	Α	10.8	10.8	9.6	9.6	7.2					
Typical threshold current	Α	0.7	0.7	0.7	0.7	0.7					
Typical operation voltage	V	6	6	4	4	2					
Typical slope	W/A	2.3	2.3	2.3	2.3	2.3					
Typical U/E efficiency	%	36	36	36	36	36					
Power stability, RMS	%					<1(over 100h in p-pol)					



Module Type ¹	Units	FL-E20-981- 200-0.22-A	FL-E20-981- 200-0.22-B	FL-E15-981- 200-0.22	FL-E15-976- 200-0.22	FL-E7.5-981- 200-0.22				
Thermal Operation Conditions										
Nominal diode heat sink temperature	$^{\circ}$	25	25	25	25	25				
operation	$^{\circ}\! \mathbb{C}$	15-30	15-30	15-30	15-30	15-30				
Minimum heat sink capacity	W	65	65	50	50	25				
Package										
Dimensions	mm^3	44*38*12.1	44*38*12.1	44*38*12.1	44*38*12.1	44*38*12.1				
Storage temperature	$^{\circ}\!\mathbb{C}$	-20~80	-20~80	-20~60	-20~60	-20~60				
Compliant						RoHS2002/9 5/EC and CE				
Additional Featu	ro-DD					compliant				
Operation Voltage	V	9	Selectable	Selectable	9	Selectable				
Output signal (min)	mA	0	Selectable	Selectable	0	Selectable				
Output signal (max)	mA	6	Selectable	Selectable	6	Selectable				
Additional Feature - Reflection Pretection										
Wavelength reflection bandwidth	nm	10401100	Selectable	Selectable	10401100	Selectable				
Reflection Ratio	%	≥99.0	Selectable	Selectable	≥99.0	Selectable				
Other Features										
Temperature sensor		NTC&PT100	NTC&PT100	NTC&PT100	NTC&PT100	Selectable				

Use a custom fiber (LIMO-SMA905-F200-0.052-FEX134), Sticker with the item number of the customer on the housing

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) –FCMSEXX(structure code) -20/15/7.5(output power) -9xx(center wavelength).

²Reduced lifetime if used above nominal operating conditions.

³Data at 25°C temperature, unless otherwise stated.

⁴A non-condensing environment is required for storage and operation below ambient dew point.

⁵Fiber length can be specified by customer.

⁶Can be with or without fiber connector.

⁷If there are any other requirements, please contact us.

⁸Temperature sensor is not inside the module, we leave one hole for assembling temperature sensor, more details please see the Device Dimension drawing, so here the type of temperature is ours recommendation .





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