

High Power Fiber Coupled Diode Laser

FCMSE55 Series



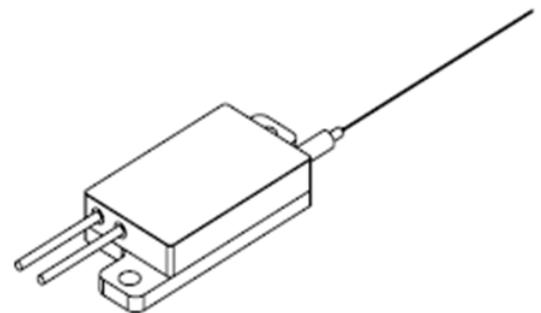
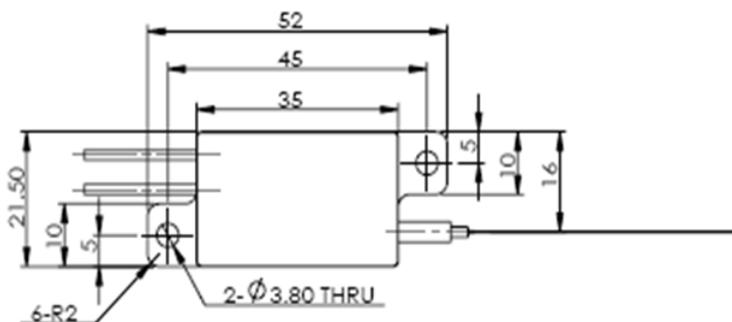
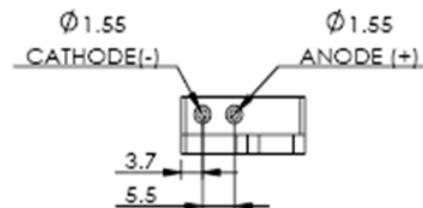
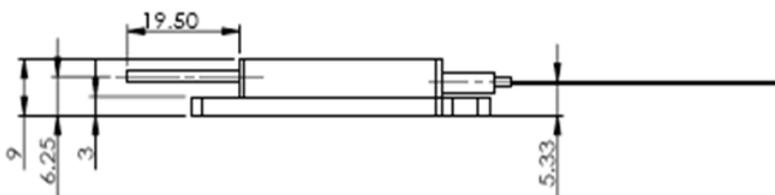
Features

- High brightness
- High power
- Compact housing
- Hermetically sealed housing
- Conduction Cooling

Applications

- Advanced Manufacturing
- Health
- Information Technology
- Scientific Research

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

Product Specifications

Product Code	FCE000004	FCE000034 ²	FCE000036 ²	FCE000010 ²
Part No. ¹	FL-FCMSE55-15-808-200	FL-FCMSE55-20-915-200	FL-FCMSE55-25-940-105	FL-FCMSE55-25-976-105

Optical Data	Unit	Value			
CW-nominal output power	W	15	20	25	25
Centroid wavelength	nm	808	915	940	976
Wavelength tolerance (±)	nm	3	10	3	10
Spectral width (FWHM)	nm	≤4	≤6	≤4	≤6
Wavelength Temp. drift	nm/°C	~ 0.28	~ 0.32	~ 0.33	~ 0.34
Feedback Protection (1040nm-1100nm)	dB	/	30	30	30

Fiber connection					
Fiber included		Yes	Yes	Yes	Yes
Fiber core diameter	μm	200	200	105	105
Numerical aperture		0.22	0.22	0.22	0.22
Fiber optic connector		SMA905	SMA905	SMA905	SMA905
Fiber length	m	1.5±0.1	1.5±0.1	1.5±0.1	1.5±0.1

Operation Conditions					
Nominal diode heat sink Temp.	°C	25	25	25	25
Diode heat sink operation Temp. ³	°C	+20 ... +30	+20 ... +30	+20 ... +30	+20 ... +30
Minimum heat sink capacity	W	50	60	60	60

Electrical Data					
Max. operation current start of life	A	7.3	10.5	10.5	11
Typical threshold current	A	1.8	0.7	0.7	0.7
Typical operation voltage	V	6	6	6	6
Typical slope	W/A	≥2.0	≥2.3	≥2.3	≥2.0
Typical E/O efficiency	%	≥38	≥45	≥45	≥43

Package					
Dimensions	mm ³	63×21.5×9	63×21.5×9	63×21.5×9	63×21.5×9
Weight basic package	g	45	45	45	45
Storage Temp.	°C	-20 ... +80	-20 ... +80	-20 ... +80	-20 ... +80

Measurement					
Fiber		AR coated, 200μm	AR coated, 200μm	AR coated, 105μm	AR coated, 105μm
Diode heat sink Temp.	°C	25	25	25	25

¹ Part No. = Brand Code - Series - Power - Centroid Wavelength - Fiber core diameter.

² Typical customization of products.

³ Operation beyond recommended temperature may cause lifetime reduction or even damage to the product.

