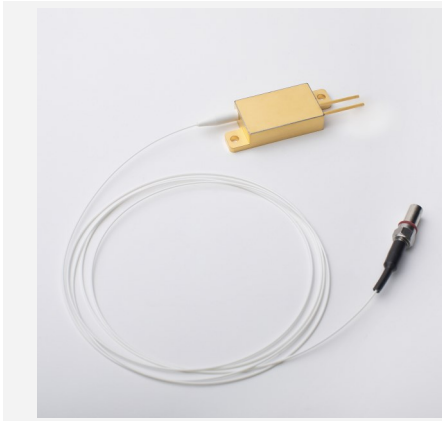


High Power Fiber Coupled Diode Laser

FCMSE55 Series



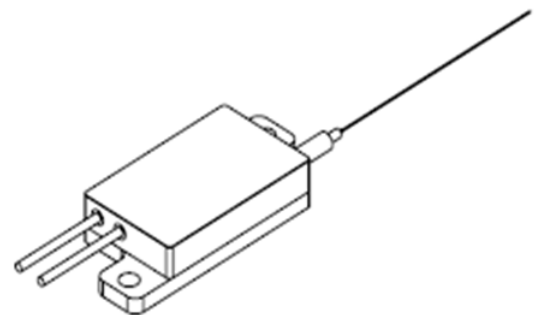
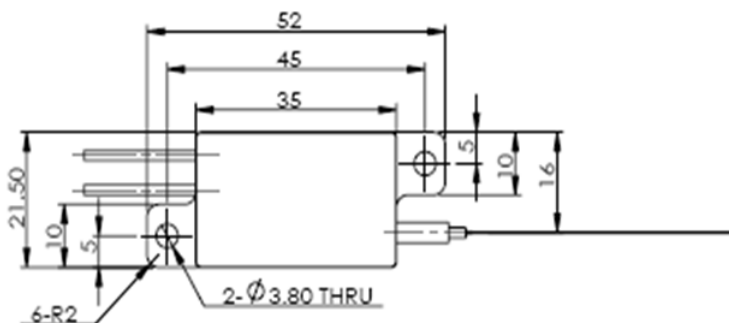
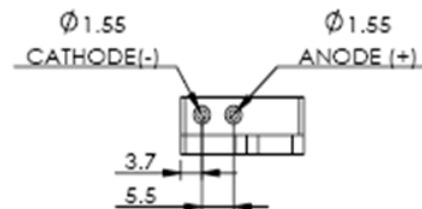
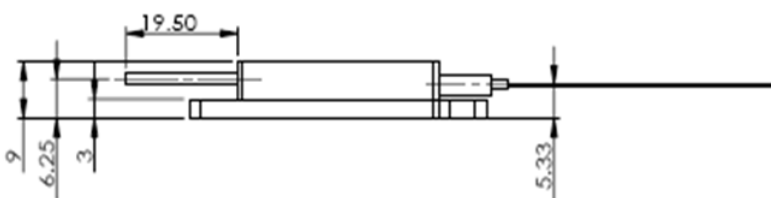
Features

- 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	FCE000036	FCE000010
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	Value	Value	Value
CW-nominal output power	W	15	20	25	25
Centroid wavelength	nm	808	915	940	976
Wavelength tolerance (\pm)	nm	3	10	3	10
Spectral width (FWHM)	nm	/	/	≤ 4	≤ 6
Wavelength Temp. drift	nm/ $^{\circ}$ 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	μ m	200	200	105	105
Numerical aperture		0.22	0.22	0.22	0.22
Fiber optic connector ²		SMA905(SF)	SMA905(SF)	SMA905(SF)	SMA905(SF)
Fiber length	m	1.5 \pm 0.1	1.5 \pm 0.1	1.5 \pm 0.1	1.5 \pm 0.1

Operation Conditions					
Nominal diode heat sink Temp.	$^{\circ}$ C	25	25	25	25
Diode heat sink operation Temp. ³	$^{\circ}$ 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	≤ 7	≤ 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 \times 21.5 \times 9	63 \times 21.5 \times 9	63 \times 21.5 \times 9	63 \times 21.5 \times 9
Weight basic package	g	45	45	45	45
Storage Temp.	$^{\circ}$ C	-20 ... +80	-20 ... +80	-20 ... +80	-20 ... +80

Measurement					
Fiber		AR coated, 200 μ m	AR coated, 200 μ m	AR coated, 105 μ m	AR coated, 105 μ m
Diode heat sink Temp.	$^{\circ}$ C	25	25	25	25

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

² SF: flat end.

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

