

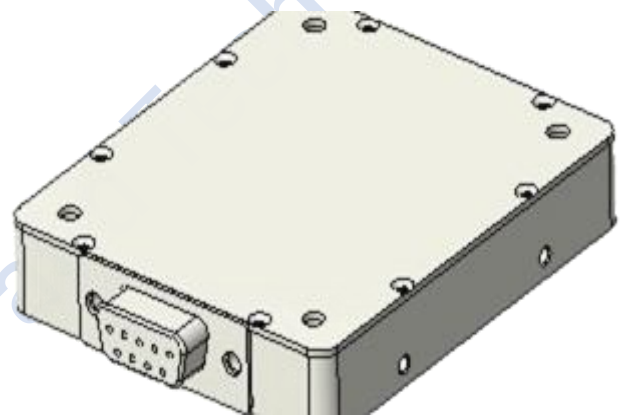
Optical transmitter module — — high power and low noise

Product introduction

High-power and low-noise semiconductor lasers are widely used in the field of optical fiber transmission and optical communication of RF signals, which have the excellent performance of high power and low noise. This performance index can realize the in-situ substitution of the same type of foreign products, and has good adaptability and high stability in high and low temperature environment.

Product features

Modular design
Tunable, low drive current
Polarization-maintaining output
Built-in automatic optical power control (APC)



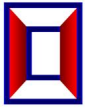
Application

Gas sensing
Optical communication
Seed light source
Optical fiber sensing

Technical Parameters

Photoelectric properties

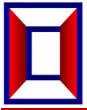
Parameter	Unit	Minimum value	Typical value	Maximum value
Operating temperature	℃	-40	—	70
Storage temperature	℃	-55	—	85



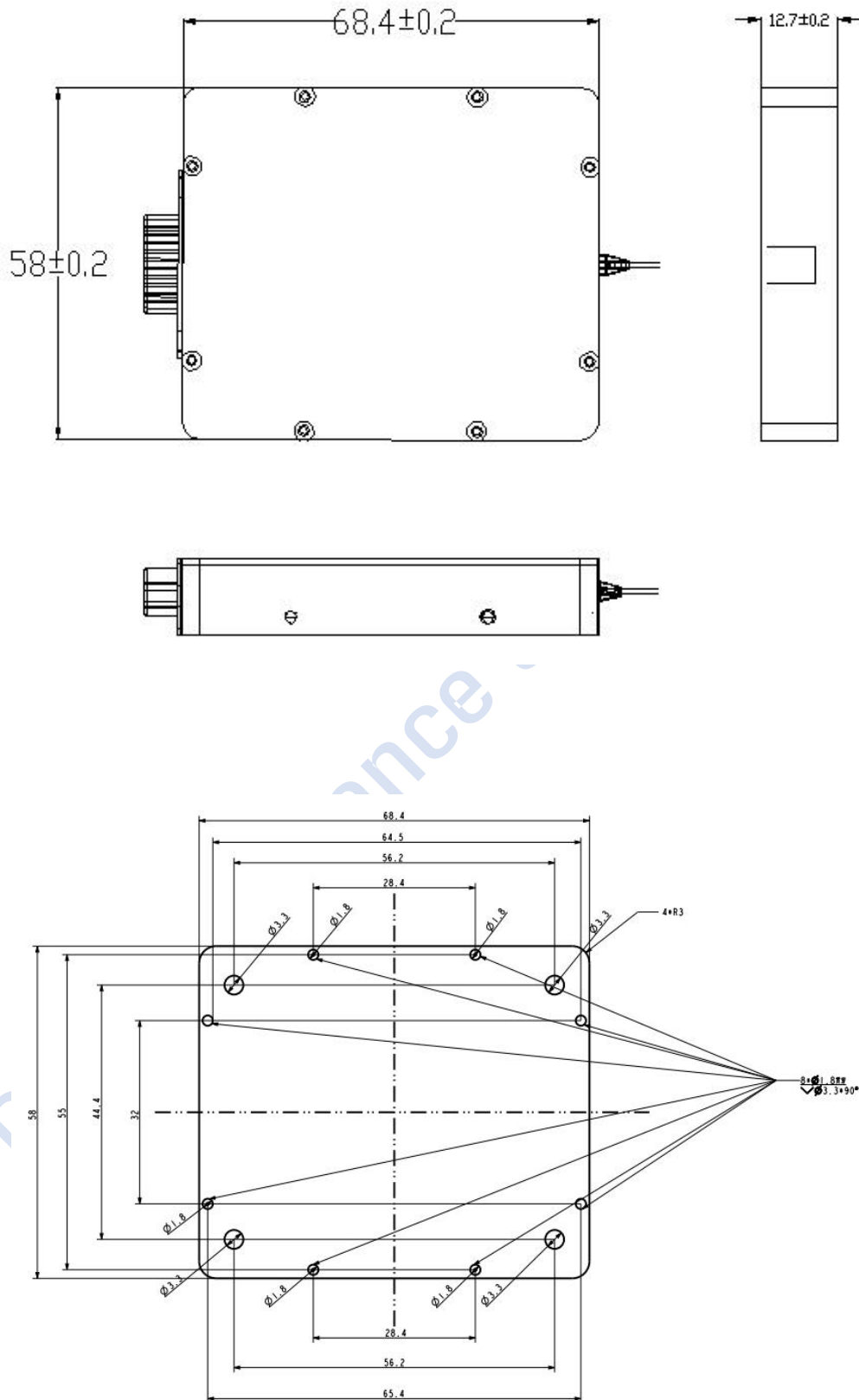
Operating voltage	V	4.8	5	5.5
ESD	V	—	—	2000
Optical output power	mW	40	—	60
Center wavelength	nm	$\lambda-0.4$	ITU, λ	$\lambda+0.4$
Side mode suppression ratio	dB	—	45	55
Polarization extinction ratio	dB	17	20	—
Line width	KHz	—	—	500
Optical isolation	dB	—	30	—
Power consumption	W	—	—	5
External interface	Unit	DB9 female		

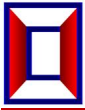
Fiber characteristics

Parameter	Specification
Fiber type	Polarization maintaining fiber
Fiber length	$1.0 \pm 0.1\text{m}$
Fiber diameter	0.9 mm Cladding
Fiber optic interface	FC/APC

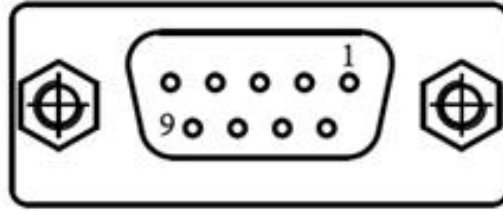


Appearance and Dimensions (unit: mm)





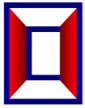
Pin definition



Serial number	Definition	Explain	Serial number	Definition	Explain
1	VCC	Voltage positive 5V	6	NC	Hanging in the air
2	TX	RS232 transmission	7	NC	Hanging in the air
3	RX	RS232 receive	8	NC	Hanging in the air
4	MODULING	Modulated signal input (optional, default none)	9	NC	Hanging in the air
5	GND	Ground			

Ordering information: HC-HPLD-M04-Cxx

Product name			Product model		
High-power low-noise optical transmitting			HC-HPLD-M04-Cxx		
Note: Optional Cxx — ITU channel wavelength					
C18	1563.05	C28	1554.94	C38	1546.92
C19	1562.23	C29	1554.13	C39	1546.12
C20	1561.42	C30	1553.33	C40	1545.32
C21	1560.61	C31	1552.52	C41	1544.53
C22	1559.79	C32	1551.72	C42	1543.73
C23	1558.98	C33	1550.92	C43	1542.94
C24	1558.17	C34	1550.12	C44	1542.14
C25	1557.36	C35	1549.32	C45	1541.35



C26	1556.55	C36	1548.51	C46	1540.56
C27	1555.75	C37	1547.72	C47	1539.77

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