SynMaster Enterprise Co., Ltd.

650nm Power changeable RED LASER MODULE - SYN-VFL18 Series

Description

The is index guided 650 nm (Typ.) AlGaInP laser diode with low threshold current and high operating temperature. The low threshold current and short wavelength are achieved by a strained multiple quantum well active layer. The lasing wavelength is 640nm which is 8 times brighter than that of 660nm lasers. The is suitable for applications such as bar-code scanners, laser printer, and other optical information systems.

Features

◎ MQW 650nm FP LD
◎ High output power
◎ Low threshold current
◎ Built-in InGaAsP monitor PD (P Type)
◎ Wide temperature range operation
(Tc= -10 to+65°C)
◎ Package : As Drawing & Dimension information

Application

◎ Laser module
◎ VFL (Visual Fault Locator)

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
LD Forward Current	IF(LD)	200	mA	
LD Reverse Voltage	VR(LD)	2	V	
PD Forward Current (For P Type)	IF(PD)	2	mA	
PD Reverse Voltage (for P Type)	VR(PD)	25	V	
Operating Temperature	TOP(LD)	-10 ～ +60	℃	
Storage Temperatur	TST	-40 ～ +80	℃	
Soldering Temperature/Time	-	240/10	℃/S	

Optical & Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Output Power	Po	1	-	20	mW	
Operating Current (for P Type)	Iop	25	-	45	mA	1mW= Iop 20~25mA 5mW= Iop 35~45mA
Operating Current (for N Type)	Iop	35	-	145	mA	5mW= Iop 35~45mA 10mW= Iop 85~90mA 20mW= Iop 120~125mA 30mW= Iop 140~145mA
Operating Voltage	Vop	-	2.2	2.8	V	
Center Wavelength	λ	640	650	660	nm	
Spectral Width	Δλ	-	-	4	nm	
Monitor Current	Im	0.1	0.2	0.5	mA	
Rise/ Fall Time	Tr/Tf	-	-	0.5	ns	

Address:
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Taoyuan County 330, Taiwan (R.O.C.)

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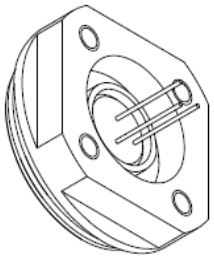
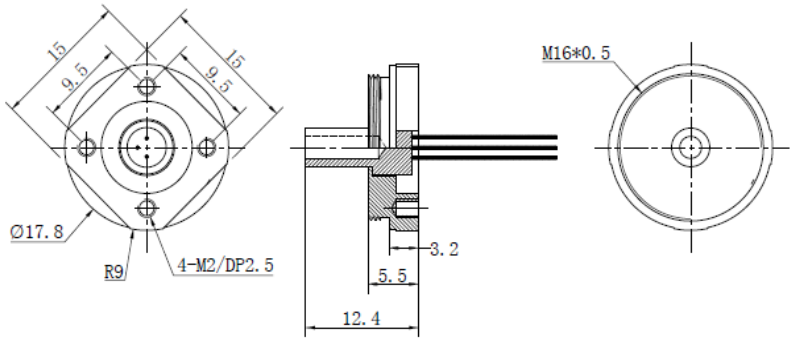
Order Information - Base

Band	Mode	Base Type	Power Range	P/N
SYN-	VFL18-B-	4 -	1mW-	SYN-VFL18-B-4-1mW
			5mW-	SYN-VFL18-B-4-5mW
			10mW-	SYN-VFL18-B-4-10mW
			20mW-	SYN-VFL18-B-4-20mW
			30mW-	SYN-VFL18-B-4-30mW
SYN-	VFL18-B-	2 -	1mW-	SYN-VFL18-B-2-1mW
			5mW-	SYN-VFL18-B-2-5mW
			10mW-	SYN-VFL18-B-2-10mW
			20mW-	SYN-VFL18-B-2-20mW
			30mW-	SYN-VFL18-B-2-30mW

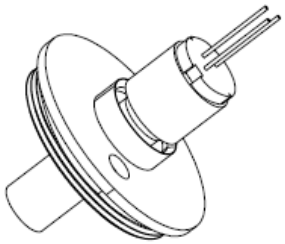
Drawing & Dimension - Base

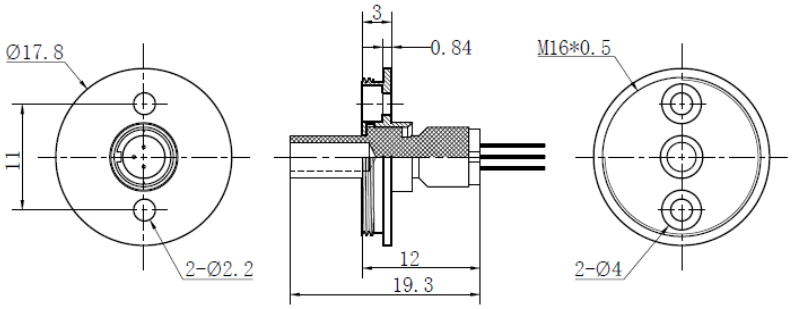
PN: SYN-VFL18-B-4-XXX





PN: SYN-VFL18-B-2-XXX





Order Information - Adapters

Band	Mode	Adaptor Type	P/N
SYN-	RMPDVFL18-P-	FC	SYN-RMPDVFL18-P-FC
		SC	SYN-RMPDVFL18-P-SC
		ST	SYN-RMPDVFL18-P-ST
		DIN	SYN-RMPDVFL18-P-DIN
		COM (FC & SC & ST)	SYN-RMPDVFL18-P-COM
		ALL (FC & SC & ST & DIN)	SYN-RMPDVFL18-P-ALL

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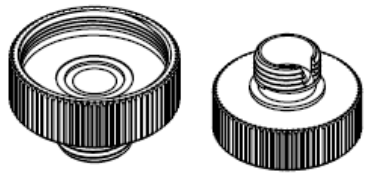
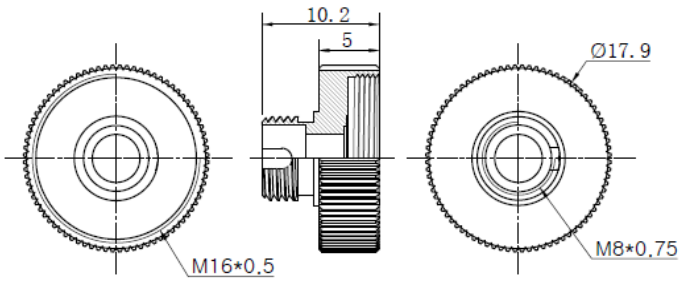
Drawing & Dimension - Adaptor

P/N : SYN-RMPDVFL18-P-FC





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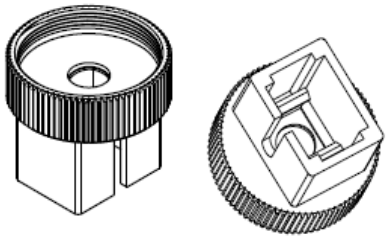
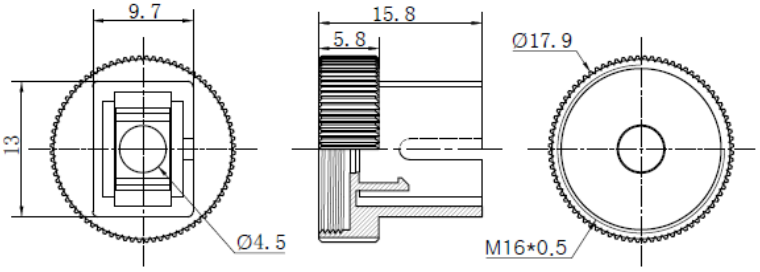
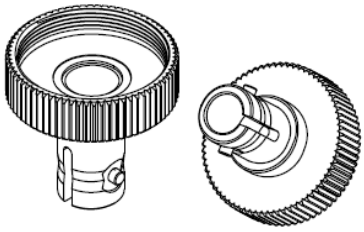
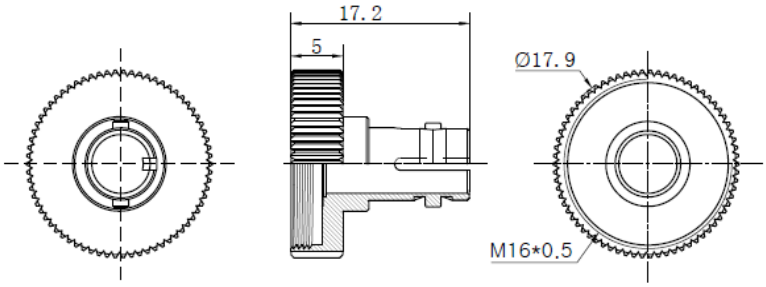


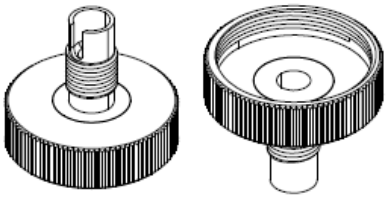


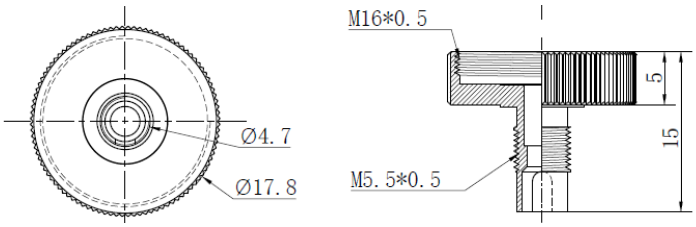
P/N : SYN-RMADVFL18-P-ST





P/N : SYN-RMPDVFL18-P-DIN





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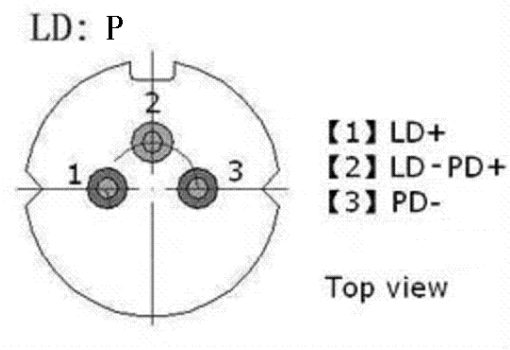
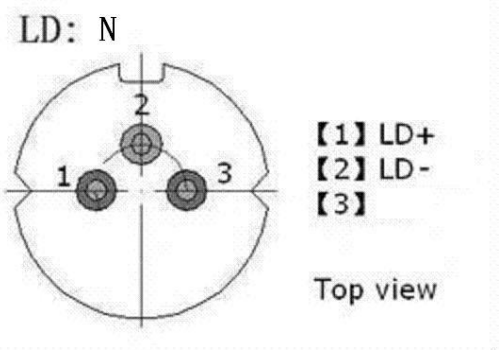
Pin Assignment





Note:

P :Type Pin Applicable Power 1~5mw

N :Type Pin Applicable Power 5~20mw

Semiconductor lasers and detectors are Static sensitive components are vulnerable to Electrostatic discharge (ESD)and surge over Current (EOS) damage! Please contact with Static sensitive

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