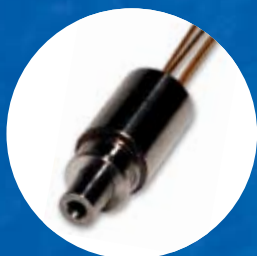


# *Finisar*<sup>®</sup>

Advanced Optical Components Division

## Product Guide

Lasers, Detectors and Passives  
for Datacom Applications

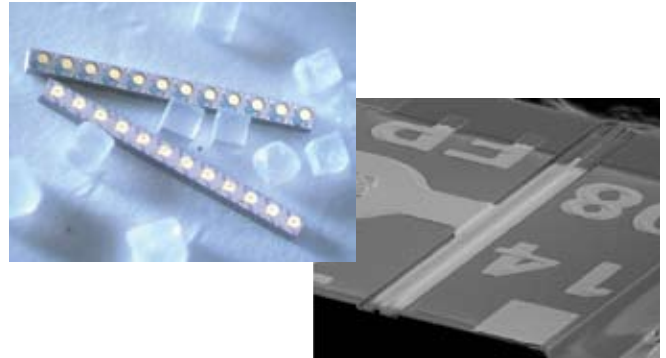


# Finisar®

Advanced Optical Components Division

With more than 100 Million optical components operating in the world today, Finisar Advanced Optical Components is the leading supplier of active and passive components for data and telecommunications systems.

- Field Proven Reliability
- Excellent On Time Delivery
- Custom and Standard Products
- Vertically Integrated Operations
- Global Sales Team
- High Volume Manufacturing
- ROHs Compliance for all Products
- Extensive Patent Protection



## 1310nm ACTIVE COMPONENTS

Finisar offers Fabry-Perot (FP) and Distributed Feedback (DFB) lasers in the 1310nm window. The state-of-the-art lasers are based on proprietary ridge waveguide structures formed in InGaAlAs/InP. The superior material system provides optimal performance for both high speed and high temperature operation. The design, wafer growth and fabrication of the FP and DFB lasers, high-speed PIN detectors and monitor photodiodes takes place in our world-class facility located in Fremont, California. The component assembly operations of these products take place in Ipoh, Malaysia.

## 850nm ACTIVE COMPONENTS

Long held as the gold standard to which all other VCSELs (Vertical Cavity Surface Emitting Lasers) are measured, Finisar has been producing AlGaAs/GaAs devices since 1996. Finisar has recorded a number of VCSEL “firsts”, including commercialization, reliability understanding, and high volume manufacturing. The design, wafer growth, and fabrication of both VCSELs and high speed PIN photodiodes takes place in our world-class facility in Allen, Texas. Assembly operations are in Ipoh, Malaysia.

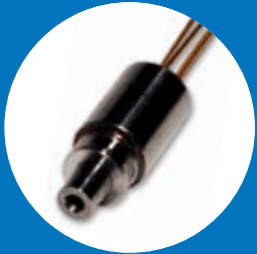
## PASSIVE COMPONENTS

Finisar is a premier supplier of passive optical components used in the production of optical circuits and modules. Product offerings range from optical isolators for the module manufacturer to complex interleavers, circulators and MUX/DEMUX products for WDM (Wavelength Division Multiplexing). The design, manufacturing, and assembly operations of all passive optical components takes place in Finisar’s first class manufacturing site in Shanghai, PRC.

## APPLICATION SELECTION MATRIX

Parameter	850nm VCSELs and Detectors	1310nm FP Lasers and Detectors	1310nm DFB Lasers and Detectors
<b>Speed</b>	0.1 to 10Gbps*	0.1 to 10Gbps*	0.1 to 10Gbps*
<b>Distance</b>	0 to 300m	0 to 10km	0 to 80km
<b>Fiber Type</b>	MMF, Ribbon	SMF, MMF	SMF
<b>Package</b>	TO-46	TO-56	TO-56
	SC/LC TOSA/ROSA	SC/LC TOSA/ROSA	SC/LC TOSA/ROSA
	Arrays		
<b>Applications</b>	IEEE 802.3	IEEE 802.3	IEEE 802.3
	Fibre Channel	Fibre Channel	Fibre Channel
	Infiniband	ATM/SONET	ATM/SONET
	HDMI/DVI	Analog Video	Analog Video

\* 17Gbps and 25Gbps components in development.



## PRODUCT SELECTION MATRIX

Active Components						
Part Number	Type	Speed	Distance	Fiber Type	Package	Application
DFB-1310-10LR-xx	DFB	10Gbps	10km	SMF	SC/LC TOSA	IEEE 802.3ae
PIN-1310-10LR-xx	PIN+TIA	10Gbps	10km	SMF	SC/LC ROSA	IEEE 802.3ae
HFE6x9x-x61	VCSEL	10Gbps	300m	MMF	SC/LC TOSA	IEEE 802.3ae
HFD6x8x-4xx	PIN+TIA	10Gbps	300m	MMF	SC/LC ROSA	IEEE 802.3ae
HFE80xx-xxx	VCSEL Array	10Gbps	300m	MMF	DIE	OIF, Infiniband
HFD80xx-xxx	PIN Array	10Gbps	300m	MMF	DIE	OIF, Infiniband
FP-1310-10LRM-xx	FP	10Gbps	220m	SMF	SC/LC TOSA	IEEE 802.3aq
PIN-1310-10LRM-xx	PIN+TIA	10Gbps	220m	SMF	SC/LC ROSA	IEEE 802.3aq
FP-1310-8GFC-xx	FP	8Gbps	2km	SMF	LC TOSA	Fibre Channel
PIN-1310-8GFC-xx	PIN+TIA	8Gbps	2km	SMF	LC ROSA	Fibre Channel
HFE7192-xxx	VCSEL	8Gbps	300m	MMF	LC TOSA	Fibre Channel
HFD718x-xxx	PIN+TIA	8Gbps	300m	MMF	LC ROSA	Fibre Channel
HFE80xx-xxx	VCSEL Array	5Gbps	300m	MMF	DIE	OIF, Infiniband
HFD80xx-xxx	PIN Array	5Gbps	300m	MMF	DIE	OIF, Infiniband
HFE4192-58x	VCSEL	4Gbps	300m	MMF	LC TOSA	Fibre Channel
HFD3180-20x	PIN+TIA	4Gbps	300m	MMF	LC ROSA	Fibre Channel
FP-1310-4I-xx	FP	4Gbps	1.4km	SMF	LC TOSA	Fibre Channel
PIN-1310-4I-xx	PIN+TIA	4Gbps	1.4km	SMF	LC ROSA	Fibre Channel
HFE419x-441	VCSEL	2Gbps	300m	MMF	LC TOSA	Fibre Channel
HFE409x-xxx	VCSEL	2Gbps	300m	MMF	TO-46	Fibre Channel
HFD3180-10x	PIN+TIA	2Gbps	300m	MMF	LC ROSA	Fibre Channel
HFE418x-421	VCSEL	1.25Gbps	550m	MMF	LC TOSA	IEEE 802.3z
HFE408x-xxx	VCSEL	1.25Gbps	550m	MMF	TO-46	IEEE 802.3z
HFD3x8x-10x	PIN+TIA	1.25Gbps	550m	MMF	LC ROSA	IEEE 802.3z
FP-1310-4I-xx	FP	Analog	2km	SMF	Pigtail	CATV
PIN-1310-4I-xx	PIN	Analog	2km	SMF	Pigtail	CATV
Passive Components - Isolators						
Part Number	Type	Isolation	Wavelength	Fiber Type	Package	Application
Custom	Free Space	Single/Double	1200-1600	SMF	Round, Square	Optical Isolation
Custom	Receptacle	Single/Double	1200-1600	SMF	LC, SC	Optical Isolation
Custom	Pigtail	Single/Double	1200-1600	SMF	LC, SC, FC, MU	Optical Isolation
Passive Components - CWDM MUX/DEMUX						
Part Number	Type	Channels	Wavelength	Fiber Type	Package	Application
FWSF-M/D-1310/CWDM-4-x	Passive	4	1200-1600	SMF	LC, SC, FC, MU	CWDM Management
FWSF-M/D-1310/CWDM-8-x	Passive	8	1200-1600	SMF	LC, SC, FC, MU	CWDM Management
Passive Components - Interleaver						
Part Number	Type	Spacing	Wavelength	Fiber Type	Package	Application
Contact	Passive	50GHz	1200-1600	SMF	LC, SC, FC, MU	DWDM
Contact	Passive	100GHz	1200-1600	SMF	LC, SC, FC, MU	DWDM

"x" denotes several options are available. Most parts are also available in SC or custom packages. Please see [www.finisar.com/aoc.php](http://www.finisar.com/aoc.php) for full part number list and data sheets.

**PRODUCT RELIABILITY  
EVERYTIME  
OUTSTANDING VALUE  
ALL THE TIME**

## ABOUT FINISAR

Finisar Corporation is a technology leader for the fiber optic subsystems and network performance test systems. These products enable high speed triple play communications for networking and storage applications over Ethernet Local Area Networks (LANs), Fibre Channel Storage Area Networks (SANs) and Metropolitan Area Networks (MANs)

Finisar has been at the forefront of delivering breakthrough products for the storage and networking industries to meet the global explosion in the world's need for information and bandwidth. These industry leading products include optical components and modules for network equipment vendors, instrument and software for communications designers, products and services for large enterprise storage networks. Finisar has established a vertically integrated business model that includes internal off-shore manufacturing capabilities that allow the company to deliver a broad portfolio of high volume products within critical market windows, with world class quality and reliability. Additionally, Finisar offers a wide range of products, services, and complete solutions for specific markets.

With more than 4,000 employees, Finisar has sales, channel, and support offices worldwide. The Company is headquartered in Sunnyvale, California (USA) with product development and manufacturing facilities located in California, Massachusetts, Texas, Malaysia, China, and Singapore. Finisar is traded on NASDAQ under the symbol FNSR.

***Finisar***<sup>®</sup>

**Advanced Optical Components Division**

For further product information or sales inquiries,  
contact us or visit our website:  
[www.finisar.com/aoc.php](http://www.finisar.com/aoc.php)  
Email: [salesAOCD@finisar.com](mailto:salesAOCD@finisar.com)  
Phone: 1-866-698-2735 (USA) or +1-214-509-2800