



## Datasheet

## Single Fiber Bidirectional SFP Transceiver

### Dual Wavelength



#### Features

- Modular optical transceiver
- Fast Ethernet and Gigabit Ethernet (GbE) support
- Link distances up to 124 km
- SFP MSA SFF-8074i compliance
- Digital Diagnostic SFF-8472 compliance
- Bellcore GR-468 compliance
- Simplex LC connector
- Hot-swap support
- Regulatory Compliances: 21 CFR 1040.10 and 1040.11: Class 1 Laser product certified by UL and/or CSA; LVD Directive: Class 1 Laser product certified by TUV; RoHS Directive and China RoHS Directive; WEEE Directive

#### Overview

By combining the transmit and receive functions onto a single fiber without an external splitter or combiner, single fiber bidirectional Small Form-Factor Pluggables (SFPs) provide a simple way to deliver Fiber to the X (FTTX). These products use a single fiber instead of a fiber pair to deliver 100 Mbps Ethernet, OC-3/STM-1, or even Gigabit Ethernet and Fibre Channel to a building. Enterprise customers also can use these modules to cut fiber cabling needs in half all the way to fiber to the desktop (FTTD) environments.

SFP transceivers from MRV Communications provide the high speeds and size advantages that networks now require while delivering the deployment flexibility and inventory control that network administrators demand. Designed to Multi-Source Agreement (MSA) standards to ensure broad network equipment compatibility, these SFPs are a perfect match for the extensive line of MRV devices including pluggable media modules, chassis, routers, and switches. They combine to create the ultimate solution in managed fiber infrastructures.

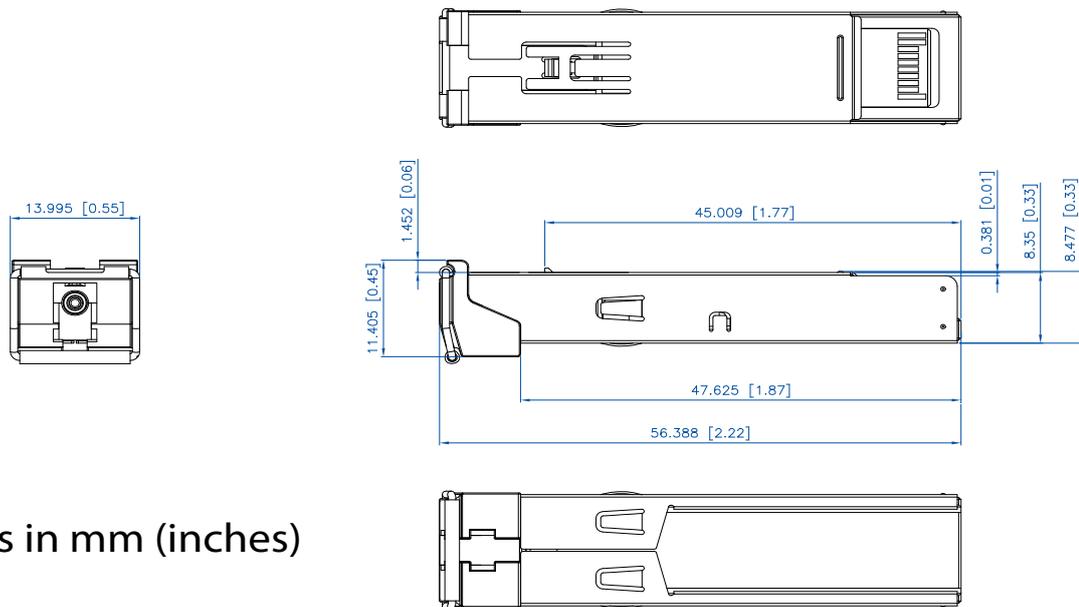
Contact your nearest authorized MRV Communications dealer and visit the MRV website at <http://www.mrv.com> for more information.

#### Ordering Information (use in pairs as shown)

Model	Description	Protocol	Connectors	Wavelength		Output Power (dBm)		Min. Receiver Sensitivity (dBm)	Saturation (dBm)	Min. Link Budget (dB)	Supply Voltage (V)	Temperature Range (°C)	Digital Diagnostics	Min Range (km)
				Tx	Rx	Min	Max							
<b>SFP-FD-BX35</b> <b>SFP-FD-BX53</b>	SFP Single Fiber Bidirectional	Fast Ethernet OC-3	LC	1310 1550	1550 1310	-14	-8	-28	-8	14	3.3	-5 to 70	Yes	0 - 25
<b>SFP-FD-BD35</b> <b>SFP-FD-BD53</b>	SFP Single Fiber Bidirectional	Fast Ethernet OC-3	LC	1310 1550	1550 1310	-5	0	-28	-8	23	3.3	-5 to 70	Yes	10 - 40
<b>SFP-FD-BZ45</b> <b>SFP-FD-BZ54</b>	SFP Single Fiber Bidirectional	Fast Ethernet OC-3	LC	1490 1570	1570 1490	-5	0	-28	-8	23	3.3	-5 to 70	Yes	20 - 80


**Ordering Information (use in pairs as shown)**

Model	Description	Protocol	Connectors	Wavelength		Output Power (dbm)		Min. Receiver Sensitivity (dbm)	Saturation (dbm)	Min. Link Budget (dB)	Supply Voltage (V)	Temperature Range (°C)	Digital Diagnostics	Min Range (km)
				Tx	Rx	Min	Max							
<b>SFP-GD-BX34</b> <b>SFP-GD-BX43</b>	SFP Single Fiber Bidirectional	Gigabit Ethernet	LC	1310 1490	1490 1310	-9	-3	-20	-3	11	3.3	-5 to 70	Yes	0 - 10
<b>SFP-GD-BD35</b> <b>SFP-GD-BD53</b>	SFP Single Fiber Bidirectional	Gigabit Ethernet	LC	1310 1550	1550 1310	-5	0	-24	-3	19	3.3	-5 to 70	Yes	6 - 38
<b>SFP-GD-BZ45</b> <b>SFP-GD-BZ54</b>	SFP Single Fiber Bidirectional	Gigabit Ethernet	LC	1490 1570	1570 1490	0	5	-24	-3	24	3.3	-5 to 70	Yes	32 - 96
<b>SFP-GD-EBZ45</b> <b>SFP-GD-EBZ54</b>	SFP Single Fiber Bidirectional	Gigabit Ethernet	LC	1490 1570	1570 1490	-2	3	-33	-9	31	3.3	-5 to 70	Yes	32 -124

**Outline Drawing**


MRV has more than 50 offices throughout the world. Addresses, phone numbers, and fax numbers are listed at [www.mrv.com](http://www.mrv.com). Please e-mail us at [sales@mrv.com](mailto:sales@mrv.com) or call us for assistance.

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