



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Product Information

# G-SFP-S35/S53-20-W Series

## Gigabit SFP Modules



## Features

- ❖ Single + 3.3V power supply
- ❖ Differential Inputs and Outputs
- ❖ Small Form Factor Pluggable MSA Compliant
- ❖ Industrial Operation Temp.: -40°C to +75 °C
- ❖ RoHS Compliant

**HENRICH**<sup>TM</sup>  
Henrich Electronics Corporation

Main Office

Tel: 860-487-9869

Fax: 860-487-9478

[www.henrich-inc.com](http://www.henrich-inc.com)

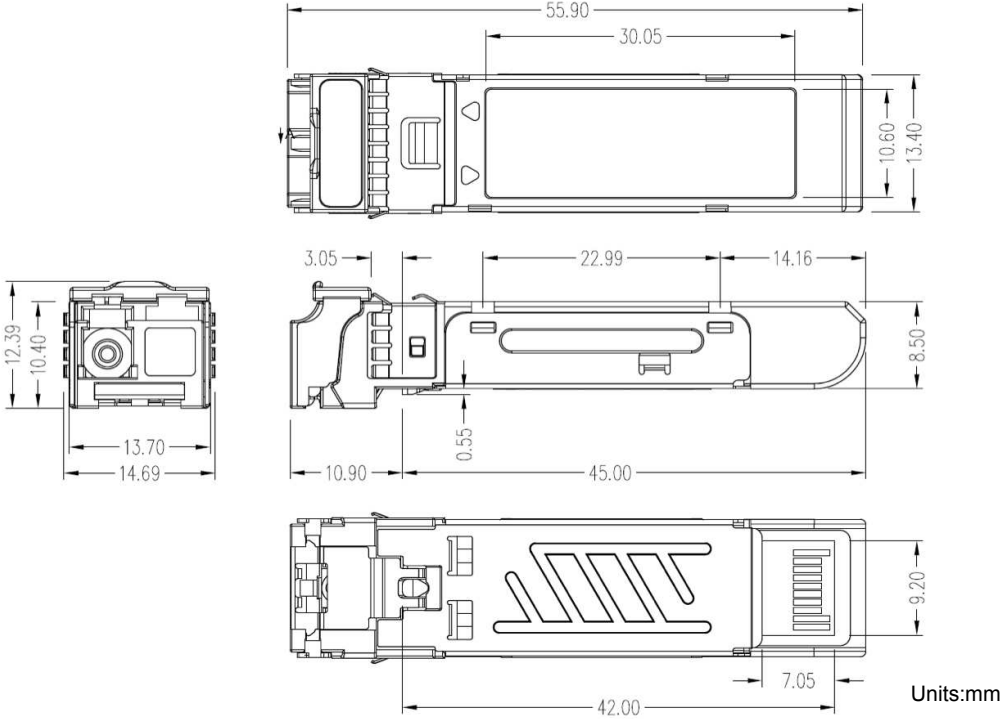
## Introduction

The transceiver from Henrich is small form factor pluggable module for serial optical data Communications applications specify of SONET OC-3 / SDH STM-1 / IEEE 802.3u. This module is designed for single-mode-fiber (SMF) with cost effective and high performance by using 1310 nm transmitter and 1490nm to 1550nm receiver, or 1550 / 1490nm transmitter and 1310nm receiver. It is with the SFP 20-pin connector to allow hot plug capability.

## Specifications

Absolute Maximum Ratings	
Supply Voltage	0~4V
Storage Temperature	-40 to +85°C
Operating Temperature	-40 to +75°C
Lead Soldering Limits	MAX: 260/10°C /sec
General Specifications	
Data Rate	0.8 to 1.5Gbps, type: 1.25Gbps
Supported Link Length on 9/125µm SMF	Min: 20Km
Supply Current	Max:300mA
Power Dissipation	1000mW
Transmitter Electrical Characteristics	
Supply Voltage	3.15 to 3.45V, type:3.3V
Data Differential Input Voltage	400 to 2000mV
Disable Input Voltage	-1.81 to -1.48V
Enable Input Voltage	-1.16 to -0.88V
TX Fault Voltage-High (Fault)	Min:2.0V
TX Fault Voltage-Low (Normal)	0-0.8V
POut@TX Disable Asserted	Max:-45dBm
Transmitter Optical Characteristics	
Output Optical Power on 9µm SMF :	-8 to -2dBm
Center Wavelength :	for 1312-20: 1280 to 1340nm (Typ: 1310) for 1520-20: 1510 to 1570nm(Typ: 1550) for 1912-20: 1470 to 1510nm(Typ:1490)
Side Mode Suppression Ratio	for 15/1912-20:(Min:30dB)
Spectral Width (-20dB)	for 15/1912-20:(Max:1nm)
Spectral Width (RMS)	for 1312-20(Max: 2nm)
Optical Rise Time (20%-80%)	Max: 0.26ns
Optical Fall Time (20%-80%)	Max: 0.26ns
Extinction Ratio	Min: 9dB
Receiver Electrical Characteristics	
Supply Voltage	3.15 to 3.45V, type:3.3V
Data Differential Output Voltage	500 to 1200mV
Receiver LOS/SD Output Voltage-High	Min:2.0V
Receiver LOS/SD Output Voltage-Low	0 to 0.8V
Data Output Rise Time (20%-80%)	Max: 0.35ns
Data Output Fall Time (20%-80%)	Max: 0.35ns
Receiver Optical Characteristics	
Maximum Receiver Power	Min: -3dBm
Receiver Sensitivity	Max: -22dBm
Operating Wavelength	for 1312-20: 1480 to 1600nm for 15/1912-20: 1250 to 1380nm
Receiver LOS/SD Output Voltage-Low	0 to 0.8V
Optical Return Loss	Max: 12dB
Signal Detect-Asserted	Max:- 22dBm avg.
Signal Detect-Deasserted	Min: -36dBm avg.
Signal Detect-Hysteresis	Min:0.5dB

Dimension drawings



## Ordering Information

### SFP-W Series

G-SFP-S35-20-W	Single Mode Fiber Port with LC Connector, 20KM, TX1310nm, Industrial Wide Temperature:-40°C to +75°C.
G-SFP-S53-20-W	Single Mode Fiber Port with LC Connector, 20KM, TX1550nm, Industrial Wide Temperature:-40°C to +75°C.