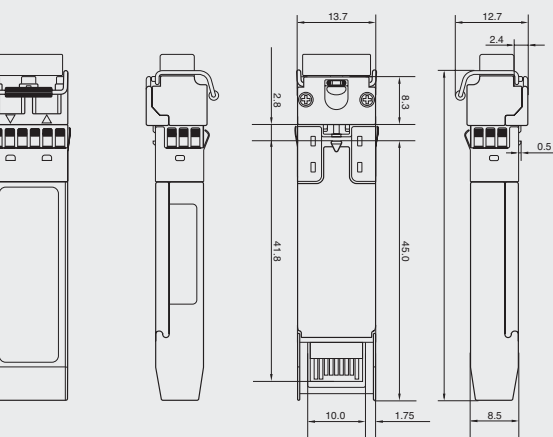




SFP 1G Graywave

Overview

Integra Optics' SFP+ transceivers are designed in accordance to industry standards and are available in a variety of power budgets and data rate options. Integra SFP+ transceivers are coded to be 100% OEM compatible and are more than capable of significantly growing network capacity to levels far beyond that of previous generation optical transceivers.



Features

- ➔ Operating Data Rate up to 1.25Gbps
- ➔ Distance Ranging from 300m to 160km
- ➔ MMF or SMF Duplex LC Connector Interface
- ➔ Commercial, Extended & Industrial Temperatures Available
- ➔ Digital Diagnostics Monitoring
- ➔ SFP MSA Compliant

Applications

- ➔ 1000Base-SX, 1000Base-LX, 1000Base-EX, 1000Base-ZX, 1000Base-EZX
- ➔ Metro-Ethernet, Data Center, and Enterprise Networks
- ➔ Fibre Channel and CPRI
- ➔ Extended ZX Optical Links

Product Specifications

Integra Part Number (MSA)	Wavelength (nm)	Distance (km)	Budget (dB)	TX Min/Max (dBm)	RX Sensitivity (dBm)	Fiber Type	Description
SFP-SX-D	850	0.550	7.5	-9.5/-3	-17	MMF/LC	SFP 1000Base-SX
SFP-10-GD	1310	10	12	-9/-3	-21	SMF/LC	SFP 1000Base-LX
SFP-40-GD	1310	40	22	-2/3	-24	SMF/LC	SFP 1000Base-EX
SFP-80-GD	1550	80	24	0/5	-24	SMF/LC	SFP 1000Base-ZX
SFP-120-GD	1550	120	32	0/5	-32	SMF/LC	SFP 1000Base-EZX
SFP-160-GD	1550	160	40	3/7	-37	SMF/LC	SFP 1000Base-EZX

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.13	3.3	3.47	V
Distance 50/125um MMF	-	-	550	m

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	770	850	860	nm
Spectral Width	-	-	0.85	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	-9.5	-	-3	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	760	850	860	nm
Average Power Per Lane	-17	-	0	dBm

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.13	3.3	3.47	V
Distance Over SMF	-	-	10	km

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1270	1310	1360	nm
Spectral Width	-	-	4	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	-9	-	-3	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1270	-	1610	nm
Average Power Per Lane	-21	-	-3	dBm

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.13	3.3	3.47	V
Distance Over SMF	-	-	40	km

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1260	1310	1360	nm
Spectral Width	-	-	1	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	-2	-	3	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1260	-	1600	nm
Average Power Per Lane	-24	-	-3	dBm

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.13	3.3	3.47	V
Distance Over SMF	-	-	80	km

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1500	1550	1580	nm
Spectral Width	-	-	1	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	0	-	5	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1260	-	1610	nm
Average Power Per Lane	-24	-	-2	dBm

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.13	3.3	3.47	V
Distance Over SMF	-	-	120	km

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1500	1550	1580	nm
Spectral Width	-	-	1	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	0	-	5	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1260	-	1610	nm
Average Power Per Lane	-32	-	-6	dBm

Detailed Specifications

Parameter	Minimum	Typical	Maximum	Unit
Storage Temperature	-40	-	85	°C
Operating Case Temperature - C-Temp	0	-	70	°C
Operating Case Temperature - I-Temp	-40	-	85	°C
Power Dissipation	-	-	1	W
Power Supply Voltage	3.15	3.3	3.45	V
Distance Over SMF	-	-	160	km

Transmitter

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1500	1550	1580	nm
Spectral Width	-	-	1	nm
Data Rate	-	1.25	-	Gbps
Average Output Power Per Lane	3	-	7	dBm
Extinction Ratio	9	-	-	dB

Receiver

Parameter	Minimum	Typical	Maximum	Unit
Center Wavelength	1260	-	1600	nm
Average Power Per Lane	-37	-	-10	dBm