



MODULE SFP GPON / EPON LR 1490NM SC-UPC



Description

The Optical Transceivers Modules are components used in conjunction to the optical PON ports and the Uplink of the Furukawa EPON and GPON OLT platform, featuring optical ports, acting as a modulators/demodulators in order to perform an optical/electrical conversion in PON networks, thus enabling data transmission over the optical network between the switch and the PON platform.

General Characteristics

Parameter	Min	Typical	Max
Voltage (Vcc)	3.135	3.3	3.465
EPON Current (mA)	-	-	600
GPON B+ Class Current (mA)	-	300	500
GPON C+ Class Current (mA)	-	-	450
Operating Temperature (°C)	0	25	70
Storage Temperature (°C)	-40	-	85
Relative Humidity - Operating (%)	0	-	80
Relative Humidity - Storage (%)	0	-	95

Technical Characteristics

Module SFP C+ CLASS 2.5GBPS LR 1490NM (20KM) - Part Number 35510275 SC-UPC Connector // Singlemode

Parameter	Min	Typical	Max
Transmission Type	1490 nm DFB CW mode		
Sinalization speed +/- 100 ppm (Mbps)	2488 Down / 1244 Up		
Average launch power (dBm)	+3	-	+7
Optical output with TX OFF (dBm)	-	-	-39
Optical rise and fall time (ps)	-	-	160
Central optical wavelength (nm)	1480	1490	1500
Spectral line @ -20 dB (nm)	0.1	-	0.6
Side suppression mode (dB/Hz)	30	-	-
Extinction rate (dB)	8.2	-	-

Parameter	Min	Typical	Max
Receiver type	1310nm PIN/TIA Burst Mode		
Wavelength (nm)	1270	1310	1360
Receiver Sensitivity (dBm)	-	-	-32
Receiver optical overload (dBm)	-12	-	-

Module SFP B+ CLASS 2.5GBPS LR 1490NM SC-UPC (20KM) - Part Number: 35510197
SC-UPC Connector // Singlemode

Transmission	Parameter	Min	Typical	Max
	Transmission Type	1490 nm DFB Laser CW mode		
	Sinalization speed +/- 100 ppm (Mbps)	2488 Down / 1244 Up		
	Average launch power (dBm)	1.5	-	5
	Optical output with TX OFF (dBm)	-	-	-45
	Optical rise and fall time (ps)	-	150	180
	Optical center wavelength (nm)	1480	1490	1500
	Spectral line @ -20 dB (nm)	-	-	1
	Side suppression mode (dB/Hz)	30	-	-
	Extinction rate (dB)	8.2	-	-

Reception	Parameter	Min	Typical	Max
	Receiver type	1310nm APD/TIA Burst Mode		
	Wavelength (nm)	1260	1310	1360
	Receiver Sensitivity (dBm)	-	-	-28
	Receiver optical overload (dBm)	-8	-	-
	Maximum input optical power (dBm)	-	-	2

Module SFP EPON 1.25GBPS LR 1490NM (20KM) - Part Number: 35510223
SC-UPC Connector // Singlemode

Transmission	Parameter	Min	Typical	Max
	Transmission Type	1490 nm DFB CW mode		
	Sinalization speed +/- 100 ppm (Mbps)	1250		
	Average launch power (dBm)	4.5	-	8
	Peak to Peak Jitter (UI)	-	-	0.20
	Optical output with TX OFF (dBm)	-	-	-39
	Optical rise and fall time (ps)	-	-	250
	Central optical wavelength (nm)	1480	1490	1500
	Spectral line @ -20 dB (nm)	-	-	1
	Side suppression mode (dB/Hz)	30	-	-
	Extinction rate (dB)	9.0	-	-
	Relative Intensity of Noise	-	-	-118
	Optical return loss tolerance (dB)	-	-	15

	Parameter	Min	Typical	Max
Reception	Receiver type	1310nm APD/TIA Burst Mode		
	Wavelength (nm)	1260	1310	1360
	Receiver Sensitivity (dBm)	-	-	-32
	Receiver optical overload (dBm)	-6	-	-
	Maximum input optical power (dBm)	-	-	4
	Receiver Reflection (dBm)	-	-	-12
	Reception Setting Time (ns)	-	-	400

Security
CAUTION

- * This device emits invisible radiation that can cause irreparable damage to vision. Never look straight to the output with the connected equipment.
- * Do not test the equipment in optical loop without the use of an appropriate attenuator. The warranty does not cover this kind of damage.
- * This equipment is sensitive to static electricity.
- * Contact us for more information about the proper handling of this equipment.

[Part Numbers](#)