TSFP1GB 1Gb/s SFP Optical Transceiver

Article No.: 308020

The TRIAX TSFP1GB is a reliable 1 Gigabit SFP optical transceiver designed for high-performance data transmission over single-mode fibre. Housed in a compact SFP package with an LC connector, it is ideally suited for network infrastructure applications requiring stable operation, low power consumption, and long transmission distances.
Operating at a wavelength of 1310nm, the module uses an FP laser paired with a PIN photodiode, ensuring robust signal integrity over distances of up to 20km. Its low power dissipation of less than 1W contributes to energy-efficient system design while maintaining excellent thermal performance, making it suitable for professional and commercial installations.

Features:

- SFP package with LC connector
- 1310pnm FP laser and PIN photodetector
- Up to 20 km transmission over single-mode fibre
- Power dissipation < 1W
- LVPECL-compatible data input/output interface
- Low EMI and excellent ESD protection
- Compliant with IEC-60825 laser safety standard

Technical specifications:

Model	TSFP1GB			
Art. Number	**308020**			
EAN	5061038089141			
	Minimum	**Typical**	**Maximum**	**Units**
Supply Voltage	0	-	+3.6	V
Operating Relative Humidity	5	-	95	%
Operation Environment				
Supply Voltage	3.15	3.3	3.45	V
Operating Temperature	0		70	°C
Power Dissipation			1	W
Data Rate		1.25		Gbps
Optical Characteristics - Transmitter Section				
Centre Wavelength	1260	1310	1360	nm
Receiver Sensitivity	-	-	4	nm
Receiver Overload	-9	-	-3	dBm
Optical Characteristics - Receiver Section				
Centre Wavelength	1260		1620	nm
Receiver Sensitivity			-22	dBm
Receiver Overload	-3			dBm
Return Loss	12			dB
Electrical Characteristics - Transmitter Section				
Input Differential Impedance	90	100	110	Ohm
Electrical Characteristics - Receiver Section				
Output differential Impedance	-	100	-	Ohm
Mechanical				
Dimensions	56.5 x 13.4 x 8.5mm			mm

Mechanical aspect: