GBIC Transceiver

MICROSENS

Description

The current transceivers of MICROSENS offer the transmission over multimode and single mode fiber up to Gigabit speeds. Depending on the version it is possible to transmit high speed services over a distance up to 120 km.

The customers reaches the highest flexibility in terms of network configuration using GBIC transceivers. Their construction allows to install them during operation (hot swap).

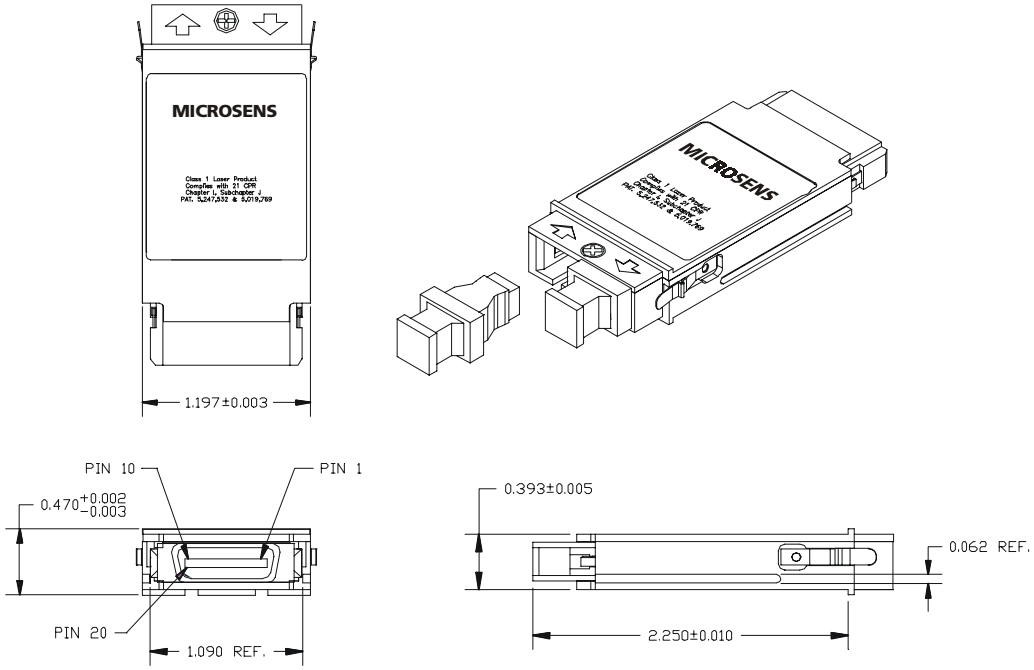
The optical transceivers of MICROSENS meet the Gigabit Interface Converter (GBIC) specifications in the revision 5.4. Furthermore they are compatible to the Gigabit Ethernet specifications according IEEE standard 802.3® and the Fibre Channel specifications FC-PH, PH2, PH3 and FC-PI 10.0.

Depending on the model, the GBICs are available with different wavelengths. For multimode applications such as Gigabit Ethernet and Gigabit Fibre Channel there are VCSEL lasers used with a wavelength of 850 nm. With this technology it is possible to cover distances up to 550 m (50/125 µm fiber). For single mode applications there are high quality lasers available with 1300 nm and 1550 nm. These lasers offer the possibility to cover distances from 10 km to 120 km, depending on the model.

Technical Specifications

Type	GBIC (Gigabit Interface Converter) Transceiver for data applications up to gigabit speed		
Fiber type	Multimode 62,5/125 or 50/125 µm, duplex, Single mode 9/125 µm duplex, SC-connectors		
Multimode VCSEL	*Wavelength:*	850 nm MM	
	min. optical power:	-10 dBm	
	min. sensitivity :	-20 dBm	
	min. distance:	550 m (50 µm), 275 m (62,5 µm)	
Single mode FP Laser 10 km	*Wavelength:*	1300 nm SM	
	min. optical power:	-8 dBm	
	min. sensitivity :	-22 dBm	
	min. distance:	10 km	
Single mode DFB Laser 80 km / 120 km	*Wavelength:*	1550 nm SM	
	min. optical power:	-4 dBm	1 dBm
	min. sensitivity :	-25 dBm	-30 dBm
	min. distance:	80 km	120 km
Standards	CDRH and IEC 825-1 class 1 eye protection		
Operating temp.	0°C to 60° C		
Power supply	5 V		

Dimensions



Eye safety

WARNING: Infrared radiation as used for data transmission within the fiber optic area which, although invisible to the human eye, can nevertheless cause damage.

To avoid damage to the eyes:–

- *Never look straight into the output of fiber optic components – danger of blinding!*
- *Cover all unused optical connections with caps.*
- *Commission the transmission link only after completing all connections.*

The active laser components used with this product comply with the provisions of **Laser Class 1**.

Order Designation

Art.-no.	Description	Connectors
MS100100	GBIC Interface Gigabit Ethernet / Fibre Channel 850 nm Multimode Transceiver	2x SC
MS100110	GBIC Interface Gigabit Ethernet / Fibre Channel 1300 nm Single mode Transceiver, min. 10 km	2x SC
MS100121	GBIC Interface Gigabit Ethernet / Fibre Channel 1550 nm Single mode Transceiver, min. 80 km	2x SC
MS100130	GBIC Interface Gigabit Ethernet / Fibre Channel 1550 nm Single mode Transceiver, min. 120 km	2x SC