

065-73TXMG Small Form-factor Pluggable (SFP) 10/100BaseT/TX Module



The Signamax 065-73TXMG is a Small Form-factor Pluggable (SFP) 10/100BaseT/TX module that supports Standard and/or Fast Ethernet over Category 5 or better twisted-pair cable at distances up to 100 meters. It adheres to the IEEE 802.3u standard for Fast Ethernet, and is a cost-effective method of providing changeable 10/100BaseT/TX Ethernet twisted-pair interfaces to switches and media converters equipped with a standard SFP slot.

APPLICATIONS

- Media Converters
- 100BaseT/TX LAN switch applications

KEY FEATURES

- Compliant with SFP MultiSource Agreement. Compliant with IEEE802.3u
- 100 meters transmission over UTP Cat. 5 cable.
- Capable of 100BASE-TX auto-negotiation.
- Single 3.3V power supply and low power dissipation.

ORDERING INFORMATION

Part Number	Description
065-73TXMG	10/100BaseT/TX SFP Module – RJ-45, 100 meters

SUMMARY SPECIFICATION

Part Number	Minimum Data Rate	Maximum Data Rate	Typical Bit Error Rate	Supply Voltage	Operating Temp.
065-73TXMG	10 Mbps	100 Mbps	10 ⁻¹⁰	3.3V	0 ~ 70 °C

DETAILED SPECIFICATIONS

• **APPLICABLE STANDARDS**

IEEE 802.3 (10BaseT Standard Ethernet)
 IEEE 802.3u (100BaseTX Fast Ethernet)

• **ABSOLUTE MAXIMUM RATINGS**

Storage Temperature: TS -40 -- 85 °C
Supply Voltage: Vcc -0.5 -- 3.6 V
Relative Humidity: 5 - 95 %

• **RECOMMENDED OPERATING CONDITIONS**

PARAMETER	SYMBOL	MIN	TYP.	MAX	UNITS	NOTE
Ambient Operating Temperature	T_{AMB}	0		70	°C	
Supply Voltage	V_{CC}	3.135	3.3	3.465	V	
Supply Current (3.3V)	I_s		190	250	mA	

• **HIGH-SPEED ELECTRICAL INTERFACE, HOST TO SFP**

PARAMETER	SYMBOL	MIN	TYP.	MAX	UNITS	NOTE
TD+, TD- Input Voltage Swing	V_{in+}, V_{in-}	250		1200	mV	2
RD+, RD- Output Voltage Swing	V_{out+}, V_{out-}	250		800	mV	2
Rise Time (Receiver)	t_r			2	ns	1
Fall Time (Receiver)	t_f			2	ns	1
Tx Input Impedance	Z_{in}		50		Ohm	2
Rx Output Impedance	Z_{out}		50		Ohm	2

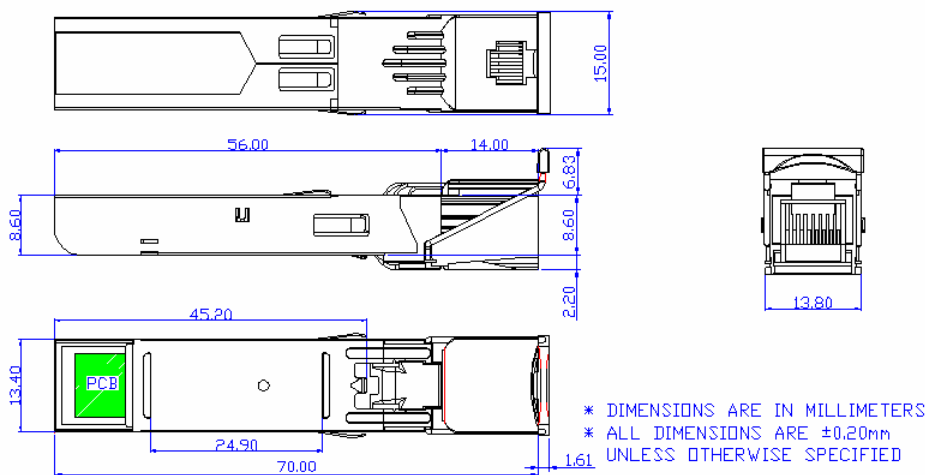
Notes: 1. 10% to 90% value
 2. Single ended

• **HIGH-SPEED ELECTRICAL INTERFACE, CABLE TO SFP**

PARAMETER	SYMBOL	MIN	TYP.	MAX	UNITS	NOTE
Transmission Frequency	f_t		125		MHz	1
Tx Output Impedance	$Z_{out, Tx}$		100		Ohm	2
Rx Input Impedance	$Z_{in, Rx}$		100		Ohm	2

Notes: 1. MLT-3 encoding per IEEE 802.3u.
 2. Differential for frequencies ranging from 1 MHz to 125 MHz.

• **MECHANICAL DIMENSIONS (units in mm)**



SPECIFICATIONS