1x9 1.25G Multimode Transceiver

Features	Applications
High Quality 850nm VCSEL Transmitting Distance up to 220m with 62.5/125μm MMF,500m with 50/125μm MMF PECL Logic Interface Low Cost, Low Power Consumption Single +3.3V Power Supply	Gigabit Ethernet Fiber Channel Links at 1.06 Gb/s

Specifications

Electrical and Optical Characteristics(Condition: $T_a=T_{OP}$)

Parameter	Symbol	Min.	Typical	Max.	Unit
Data Rate	B	--	1250	--	Mb/s
Center Wavelength	λ_C	830	850	860	nm
Output Spectral Width	$\triangle\lambda$	--	--	0.85	nm
Output Optical Power*	P_0	-9.5	--	-3	dBm
Extinction Ratio	E.R.	9	--	--	dB
Operating Current	I_{CC}	--	60	80	mA
Operating Voltage	V_{CC}	+3.0	--	+3.6	V
Input Voltage-Low	V_{IL}	-1.810	--	-1.475	V
Input Voltage-High	V_{IH}	-1.165	--	-0.880	V
Rising Time	Tr	--	1	3.0	ns
Falling Time	Tf	--	1	3.0	ns
Operating Wavelength	λ	--	850	--	nm
Receiver Sensitivity	P_{min}	--	--	-17	dBm
Maximum Optical Power	P_{max}	-3	--	--	dBm
Operating Current	I_{CC}	--	70	100	mA
Supply Voltage	V_{CC}	+3.0	--	+3.6	V
LOS Output-Low	V_{IL}	-1.810	--	-1.475	V
LOS Output -High	V_{IH}	-1.165	--	-0.880	V
LOS Asserted（H-L）	PD	--	--	-20	dBm
LOS Deasserted（L-H）	PA	-35	--	--	dBm

*Measure the average power coupled into 62.5/125um, 0.275NA graded index Multi-Mode fiber.

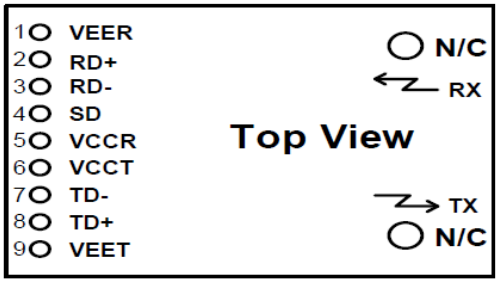
Absolute Maximum Ratings(TC=25°C)

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	TST	-40	+85	C
Supply Voltage	VCC	0	+6	V
Input Voltage	VIN	0	VCC	V
Soldering Temperature & Time	--	--	240/10	C /S

Recommended Operating Environment

Parameter	Symbol	Min.	Typical	Max.	Unit
Supply Voltage	VCC	+3.0	+3.3	+3.6	V
Operating Temperature	TOP (Commercial grade)	0	--	+70	C
	TOP (Industrial grade)	-40	--	+85	C

Pin Description



Pin	Name	Level	Description
1	VEER		Negative power of receiver section, normally grounded
2	RD+	LVPECL	Receiver Data Output
3	RD-	LVPECL	Inverted Receiver Data Output
4	SD	LVPECL	Optical alarm of receiver section,High level when normal, low level when no light
5	VCCR		Positive power of receiver section, normally +3.3V
6	VCCT		Positive power of transmitter section, normally +3.3V
7	TD-	LVPECL	Inverted Transmitter Data input
8	TD+	LVPECL	Transmitter Data input
9	VEET		Negative power of transmitter section, normally grounded

Ordering Information

TRAN	Packaging	Data Rate	Wavelength	Connector	Operation Temperature	Operation Voltage	SD Interface
TRAN	1x9 SFP	155M 1.25G	1310 850	SC/PC ST/PC	1=0~+70 C 2=-4 ~+85 C	5=+5V 3=+3.3V	P=PECL T=TTL