



Maximum Input Power	P <sub>MAX</sub>	-3	-	-	dBm
Threshold-Assertion:	SDHIGH	-	-	-30	dBm
Signal Detect Threshold-Deassertion:	SDLOW	-45	-	-	dBm
Hysteresis	-	0.5	-	-	dBm
Output High Voltage	V <sub>OH</sub>	V <sub>CC</sub> -1.03	-	V <sub>CC</sub> -0.89	V
Output Low Voltage	V <sub>OL</sub>	V <sub>CC</sub> -1.82	-	V <sub>CC</sub> -1.63	V
Operating Wavelength	$\lambda_c$	1260	-	1600	nm
Supply Current	I <sub>CC</sub>	-	80	110	mA

#### Absolute Maximum Ratings:(TC=25°C)

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T <sub>ST</sub>	-40	+85	°C
Operating Temperature	T <sub>IP</sub>	0	+70	°C
Input Voltage	T <sub>CC</sub>	0	+5	V

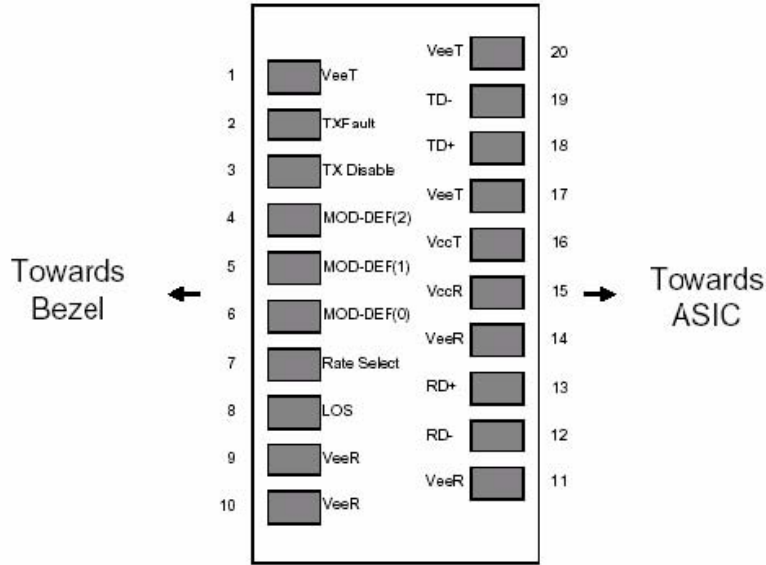
#### Recommended Operating Environment:

Parameter	Symbol	Min.	Typical	Max.	Unit
Supply Voltage	V <sub>CC</sub>	+3.15	+3.3	+3.45	V
Operating Temperature	T <sub>OP</sub>	0	-	+70	°C

#### Timing Characteristics:

Parameter	Symbol	Min.	Typical	Max.	Unit
TX_DISABLE Assert Time	t <sub>off</sub>		3	10	usec
TX_DISABLE Negate Time	t <sub>on</sub>		0.5	1	msec
Time to initialize include reset of TX_FAULT	t <sub>int</sub>		30	300	msec
TX_FAULT from fault to assertion	t <sub>fault</sub>		20	100	usec
TX_DISBEL time to start reset	t <sub>reset</sub>	10			usec
Receiver Loss of Signal Assert Time (off to On)	T <sub>A</sub> ,R <sub>X</sub> _LOS			100	usec
Receiver Loss of Signal Assert Time (on to off)	T <sub>d</sub> ,R <sub>X</sub> _LOS			100	usec

#### Pin Assignment:



Pin out of Connector Block on Host Board

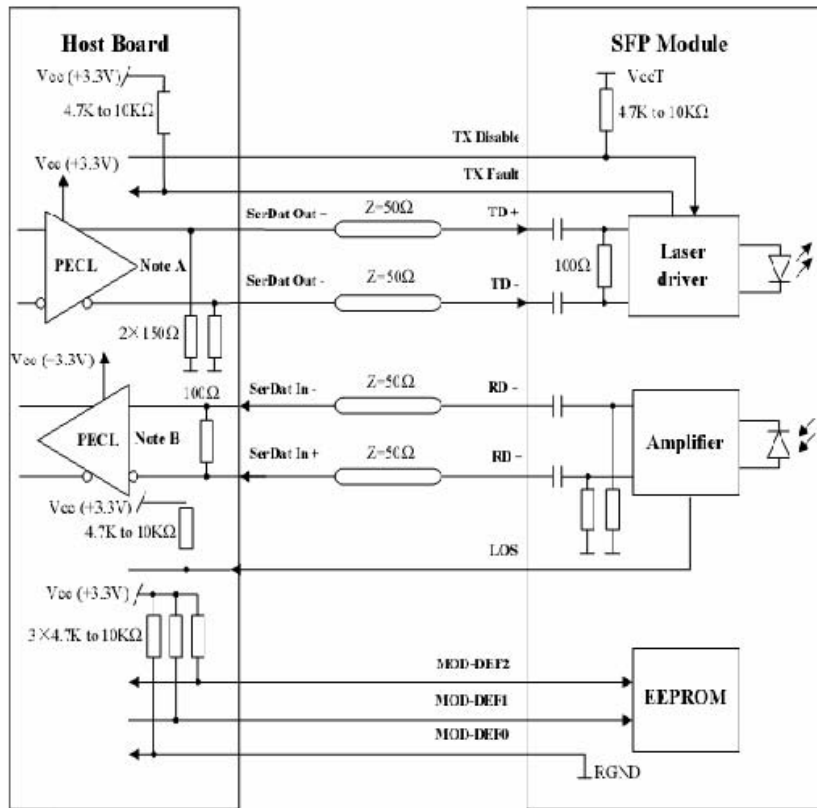
### Pin Description:

Pin	Symbol	Name/Description	Ref.
1	$V_{EET}$	Transmitter Ground (Common with Receiver Ground)	1
2	$T_{FAULT}$	Transmitter Fault. <b>Low normal operation, High Fault indication</b>	
3	$T_{DIS}$	Transmitter Disable. Laser output disabled on high or open.	2
4	MOD DEF(2)	Module Definition 2. Data line for Serial ID.	3
5	MOD DEF(1)	Module Definition 1. Clock line for Serial ID.	3
6	MOD DEF(0)	Module Definition 0. Grounded within the module.	3
7	Rate Select	No connection required	
8	LOS	Loss of Signal indication. Logic 0 indicates normal operation.	4
9	$V_{EER}$	Receiver Ground (Common with Transmitter Ground)	1
10	$V_{EER}$	Receiver Ground (Common with Transmitter Ground)	1
11	$V_{EER}$	Receiver Ground (Common with Transmitter Ground)	1
12	RD-	Receiver Inverted DATA out. AC Coupled	
13	RD+	Receiver Non-inverted DATA out. AC Coupled	
14	$V_{EER}$	Receiver Ground (Common with Transmitter Ground)	1
15	$V_{CCR}$	Receiver Power Supply	
16	$V_{CCT}$	Transmitter Power Supply	
17	$V_{EET}$	Transmitter Ground (Common with Receiver Ground)	1
18	TD+	Transmitter Non-Inverted DATA in. AC Coupled.	
19	TD-	Transmitter Inverted DATA in. AC Coupled.	
20	$V_{EET}$	Transmitter Ground (Common with Receiver Ground)	1

### Notes:

1. Circuit ground is internally isolated from chassis ground.
2. Laser output disabled on  $T_{DIS} > 2.0V$  or open, enabled on  $T_{DIS} < 0.8V$ .
3. Should be pulled up with 4.7k – 10kohms on host board to a voltage between 2.0V and 3.6V. MOD\_DEF(0) pulls line low to indicate module is plugged in.
4. LOS is open collector output. Should be pulled up with 4.7k – 10kohms on host board to a voltage between 2.0V and 3.6V. Logic 0 indicates normal operation; logic 1 indicates loss of signal.

## Recommended Circuit:



Note A: Circuit assumes open emitter output

Note B: Circuit assumes high impedance internal bias @ Vcc-1.3V

## Mechanical Dimensions:

