



TX5S34, TX3S35, TX3S36 2.5 Gb/s Optical Transmitter Module

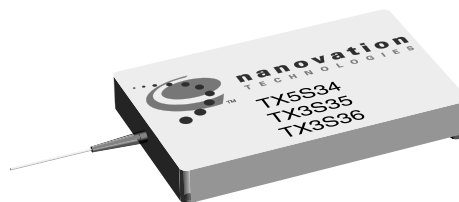
Nanovation's 1510nm Supervise Receive Photoelectronic Module incorporates a positive-intrinsic-negative (PIN) diode or a field effect transistor (FET) as well as an IC main amplifier, shaper and equalizer. The product, which can be used for DWDM systems and other fiber optic transmission networks, provides 1510nm channel supervision and monitors signal loss. It meets ITU-T G.692 recommendations.

Features

- High performance DFB laser
- Built-in optical isolator (isolation > 30 dB)
- D flip-flop regeneration
- Low data jitter
- Transmission span up to 100 km
- Operation in the 1310 or 1550 nm region
- Alarm functions
- Low power dissipation (<1.2 W)
- Clock and data alignment tolerance: 300 ps
- Complaint with multi-source standard
- Compact package size

Applications

- SONET OC-48 and SDH STM-16 transmission systems
- Digital TV
- Gigabit Ethernet



Electrical Interface and Alarm Functions

- **Data input and clock signal:** ECL with 50 Ω termination
- **LD shut-down:** CMOS high when LD shut down, CMOS low when in normal operation
- **BF monitor:** Analog voltage output equal to 1200 * I_{monitor} (μA)
- **Bias monitor:** Analog voltage output equal to 20 * I_{monitor} (mA)

Optical Characteristics (T=25°C)

Parameter	Specification			Unit
	TX5S34	TX3S35	TX3S36	
ITU-T G.9	L-16.1	S-16.1	I-16.1	Mb/s
Optical Power	-3 to +1			dBm
Central Wavelength	1535 - 1565	1280 - 1335		
Spectral Width	< 1 (at -20 dB)		< 2 (RMS)	nm
SMSR	> 30			dB
Extinction Ratio	8.2			dB
Power Consumption	1.5			W
Dispersion	< 2	< 1		ps
Power Supply	± 5.0			V
Operating Temperature	-5-70			°C



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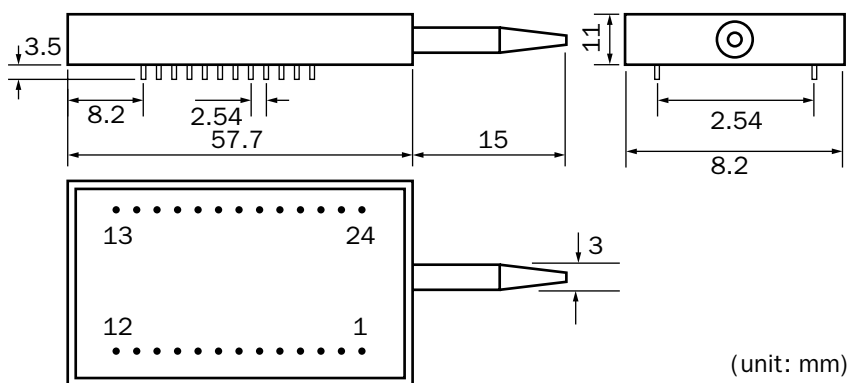
Absolute Maximum Ratings

Parameter	Min.	Max.	Unit
Power Supply	± 4.75	± 5.25	V
Operating Temperature Range	-5	70	°C
Storage Temperature Range	-40	85	°C

Pin Information

Pin	Description	Pin	Description
1	+5 V	13	+5 V
2	BF monitor	14	NC
3	Bias monitor	15	GND
4	LD shutdown	16	Data +
5	NC	17	GND
6	GND	18	Data -
7	NC	19	GND
8	NC	20	Clock +
9	NC	21	GND
10	NC	22	Clock -
11	NC	23	GND
12	-5 V	24	+5 V

Outline Drawing



To order or for additional information, please contact us at:

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