# PGT 5226 Optical Transmitter Module for STM-1 LH/OC-3 LR

The transmitter module is intended for use at SDH and SONET bit rates. The device meet all present requirements in the ITU-T (G.957, G.958) and Bellcore (GR-253-CORE) recommendations.

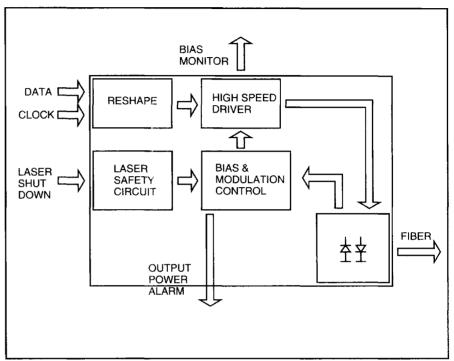
The single silicon IC is used as a laser-driver, modulator with data re-shape and automatic power control. To ensure a proper laser operation over the wide temperature range and life of operation both the peak and average optical output power are controlled. The laser bias is externally accessible for monitoring of the performance. A power alarm is activated when the average optical power or the extinction ratio cannot be maintained within specification.

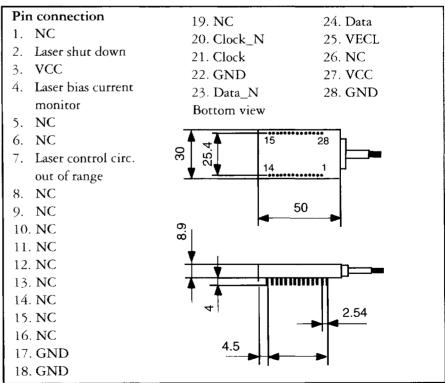
A laser power down function is also provided according to SDH/SONET requirements.

Ericsson Components fiber optic products are qualified to Ericsson internal standards which use MIL-STD-883 test methods.

#### **Features**

- Low power consumption
- Peak and average power control
- Single +5.0 V supply
- Small size (30x50x9 mm³)
- CMOS alarm output
- Clocked or non-clocked reshape





### **Optical and Electrical Specification**

Item	PGT 5226	Unit
Bit rate	155.52	Mbit/s
Average output power	-5.0 to -0.0	dBm
Peak wavelength	1280 - 1335	nm
Spectral width (RMS)	max 4.0	nm
Extinction ratio	min 13	dB
Output signal jitter	max 0.01	UI rms
Eye diagram	G. 957	ITU-T
Power consumption	max. 1.0	W
Power supply	+5.0 ± 0.3	V
Operating case temperature	-40 to +70	°C

#### **Electrical Interface**

Input signals ECL or P-ECL (10 K or 100 K) AC coupled with 50 ohm termination.

Laser shut down

CMOS (max 200 ms delay/wake up time), active high.

Laser bias monitor

Analogue voltage between 0 and +5 V (40 mV/mA).

Laser control circuitry out of range CMOS, active high when the laser control circuitry is out of range

and no longer can maintain output power or extinction ratio within

specification.

# **Quality Assurance**

Ericsson Components commitment to quality has been proved through a decade of semiconductor device production and has been confirmed to ISO 9001. These products are qualified according to the intention of Bellcore (TR-NWT-000468) and supplied with final test data.

## **Connector Options**

FC/PC

SC

(Other connector available on request)

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