

PGR 5240

Optical Receiver Module

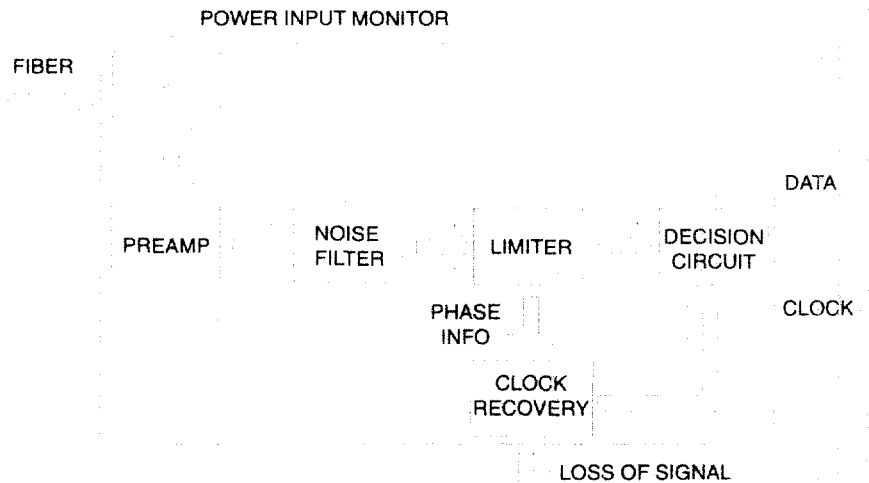
for STM-4 SH/LH/OC-12 IR/LR

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

The receiver consists of a InGaAs PIN photodiode and silicon IC's. Preamplifier, noise filter, limiter, clock recovery and decision are performed on chip. The few external components and the advanced assembly technology minimize the size of the package and the power consumption. Alarm output for loss of signal and an optical power monitor are provided according to SDH/SONET requirements. Ericsson Components fiber optic products are qualified to Ericsson internal standards which use MIL-STD-883 test methods.

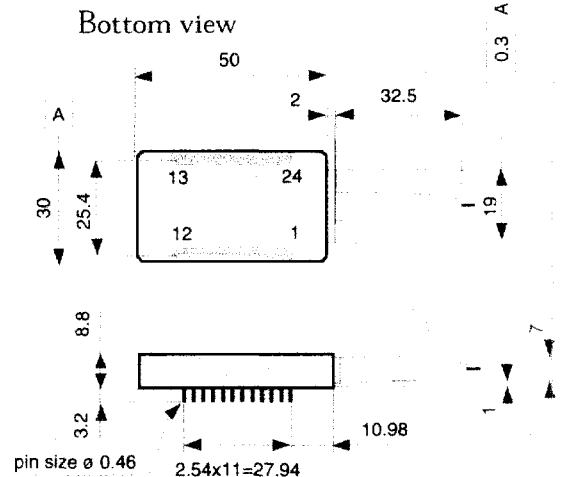
Features

- Low power consumption
- Built-in clock recovery
- Size (30x50x9 mm)
- Alarm for loss of signal
- Monitor for input power



Pin connection

1.	VEE	18.	VEE
2.	VEE	19.	GND
3.	Alarm, loss of signal	20.	GND
4.	GND	21.	Optical Power Monitor
5.	Clock_N	22.	VCC
6.	Clock	23.	GND
7.	GND	24.	GND
8.	GND		
9.	GND		
10.	Data		
11.	Data_N		
12.	VCC		
13.	NC		
14.	GND		
15.	GND		
16.	GND		
17.	GND		



Optical and Electrical Specification

Item	PGR 5240	Unit
Bit rate	622.08	Mbit/s
Operating wavelength	1260-1360/1480-1580	nm
Minimum sensitivity	-28	dBm
Minimum overload	-8.0	dBm
Optical path penalty	1.0	dB
Impedance	50	ohm
Output clock jitter	max 0.01	UI rms
Jitter bandwidth	max 500	kHz
Jitter amplification	max 0.1	dB
Jitter tolerance	G. 958	ITU-T
Supply voltage	+5.0 ± 0.3 - 5.2 ± 0.3	V
Power consumption	max 1.0	W
Operating case temperature (note 1)	-40 to +70	°C

Note 1. -40 to +85°C also available.

Electrical Interface

Output signals	ECL (100K) DC coupled with pull down resistors internally. Data and clock are differential outputs.
Optical power monitor	Range: -5 to -37 dBm. -100 mV/dB, +2 V corresponds to -20 dBm.
Loss of signal alarm	CMOS output, active high.
Wake up time (max)	20 ms.

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 connectors available on request)

Ericsson Components

Phone: +46 (8) 757 4402

Fax: +46 (8) 757 4621

American Sales Region

Phone: +1 (972) 583 7236

Fax: +1 (972) 583 5005

European Sales Region

Phone: +44 (1793) 488 300

Fax: +44 (1793) 488 301

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Specifications subject to change without notice.

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