

PGT 204 05

Optical Transmitter Submodule for 10 Gbps

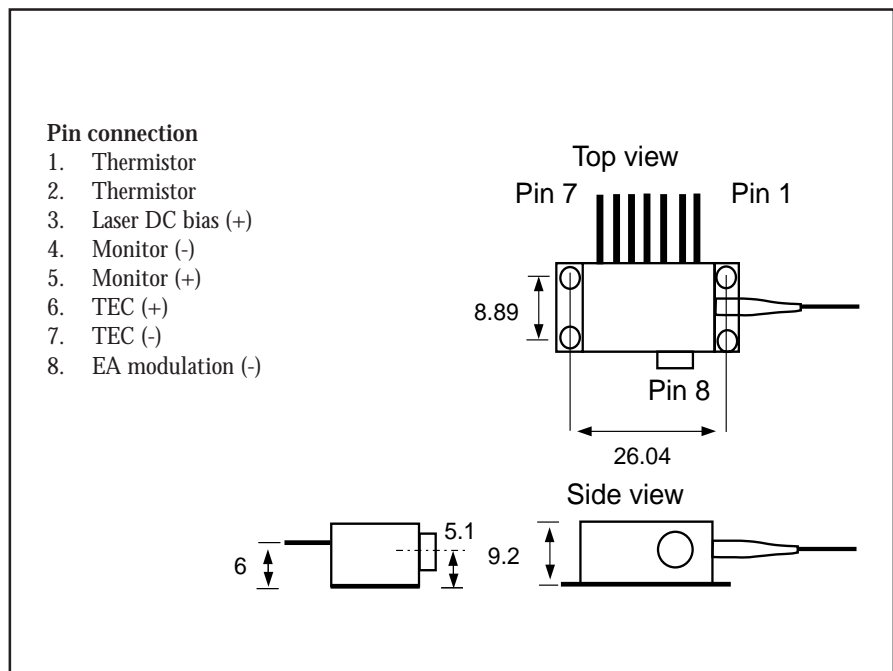
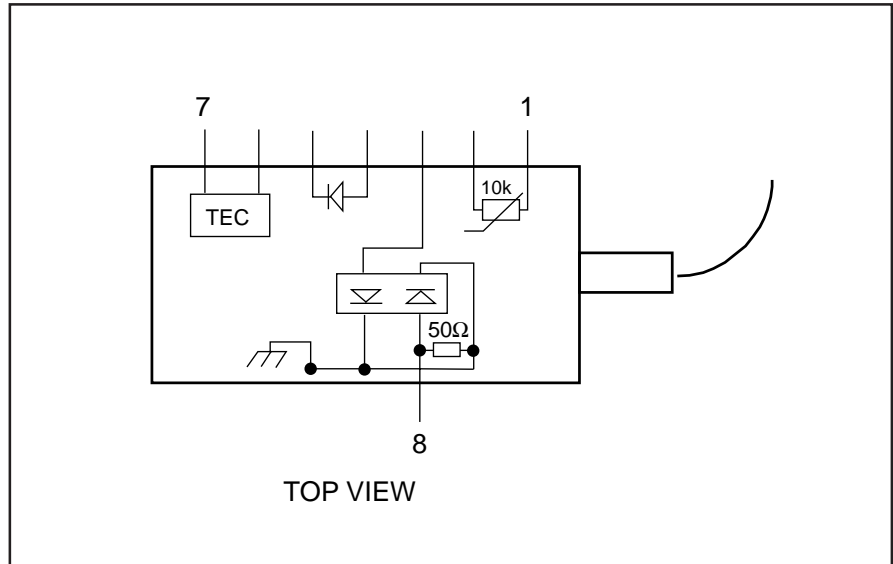
The transmitter module, intended for OC-192/STM-64 D-WDM applications, consists of a DFB laser with integrated absorpton modulator mounted in a high-speed package including isolator.

Key Features

- 1.55 μm DFB CW source monolithically integrated with an ElectroAbsorption-modulator (EA)
- Hermetic, 7-pin butterfly
- Single-mode fiber pigtail package
- FC/PC, SC or ST connector
- 12 GHz typical bandwidth
- -2 dBm typical output power
- Multi sourced footprint

Applications

- SDH STM-64 LH
- SONET OC-192 LR



Optical and Electrical Specification

Characteristics	Item	Min	Max	Unit	Condition
Limits	Laser forward current		150	mA	
	Laser reverse voltage		2	V	
	Modulator voltage	-4	1	V	
	Monitor voltage	-10	1	V	
	Storage temperature	-40	75	°C	
	Operating case temp.	0	70	°C	
CW electrical	Operating temp. chip	20	35	°C	
	Operating current, I _{op}	25	100	mA	
	Threshold current, I _{th}	2	25	mA	
CW optical	Forward voltage, V _f		2	V	
	Side mode suppr. ratio	35		dB	
	Wavelength, λ	1530	1564	nm	
HF electrical	Reflection, S ₁₁		-12	dB	0-5 GHz
HF optical	Transmission E/O, S ₂₁	12		GHz	-3 dB bandwidth
	Rise/Fall time, tr/ta		50	ps	10/90%
	Output power, P _{out}	-2		dBm	
	Extinction ratio, ER	10		dB	0/-2V mod.
	Dispersion penalty		1	dB	at 950* ps/nm disp.
Monitor	Monitor current	0.05	1.0	mA	
	Monitor dark current		100	nA	-5 V
Isolator	Optical isolation	30		dB	
Termistor	Termistor resistance	9.5	10.5	kΩ	@ 25°C
TEC	Voltage	-3	+3	V	
	Current	-1	+1	A	
	Power		3	W	

*Two more 10 Gb/s submodules are intended to be released during 1999; a two km device and a 80 km device.

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 applicable Bellcore standards and Ericsson internal quality specifications, 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

Information given in this data sheet is believed to be accurate and reliable. However no responsibility is assumed for the consequences of its use nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Ericsson Components AB. These products are sold only according to Ericsson Components general conditions of sale, unless otherwise confirmed in writing.



Specifications subject to change without notice.
1522-PGT 204 05 Uen Rev. A
© Ericsson Components AB, February, 1999