

PGT 201 10 Optical Transmitter Submodule for 10 Gbps

Preliminary

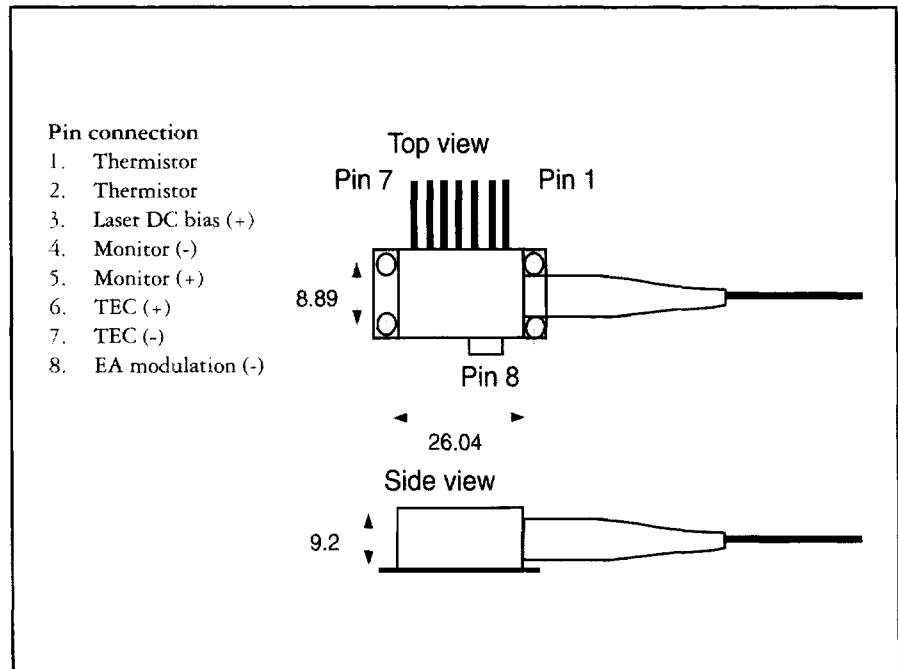
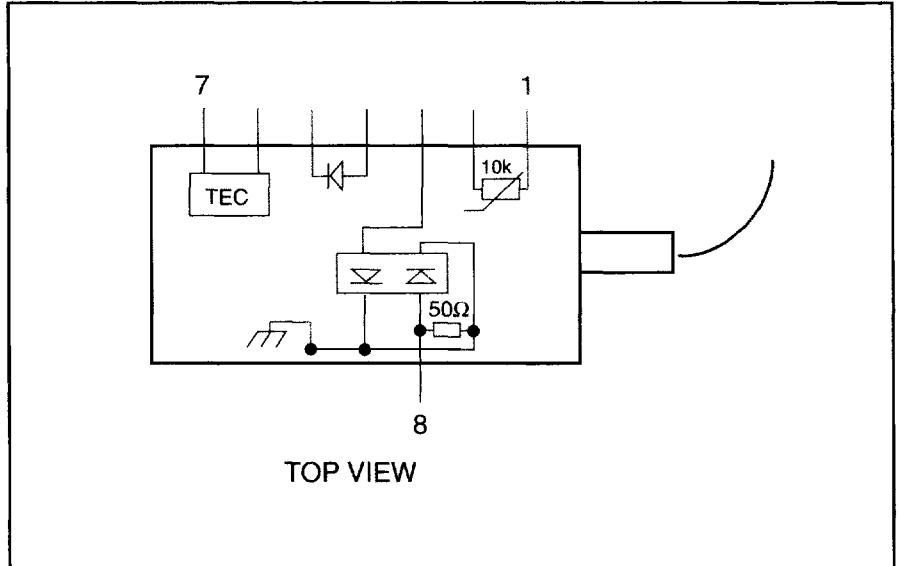
The transmitter module, intended for OC-192/STM-64 applications, consists of a DFB laser with integrated absorpton modulator mounted in a high-speed package including isolator.

Features

- 1.55 μm DFB CW source monolithically integrated with an ElectroAbsorption-modulator (EA)
- Hermetic, 14 pin butterfly
- Single-mode fiber pigtail package
- FC/PC, SC or ST connector
- 12 GHz typical bandwidth
- 0 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	-5	1	V	
	Monitor voltage	-10	1	V	
	Storage temperature	-40	75	°C	
	Operating case temp.	0	70	°C	
CW electrical	Operating temp. chip, I _{op}	20	30	°C	
	Operating current	25	75	mA	
CW optical	Threshold current, I _{th}	2	25	mA	
	Forward voltage, V _f		2	V	
	Output power, P _{out}	2	5	mW	EA-voltage=0
	Side mode suppr. ratio	30		dB	
	Wavelength, λ	1530	1564	nm	
HF electrical	Reflection, S ₁₁		-10	dB	0-8 GHz
	Transmission E/O, S ₂₁	10		GHz	-3 dB bandwidth
HF optical	Rise/Fall time, τ_r/τ_f		50	ps	10/90%
	Extinction ratio, ER	10		dB	0/-2V mod.
	Dispersion penalty		1	dB	at 800 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	k Ω	
Peltier	Voltage	-3	+3	V	
	Current	-1	+1	A	
	Power		3	W	

Quality Assurance

Ericsson Components commitment to quality has been proved through a decade of semiconductor laser diode production and has been confirmed to ISO 9001. These products are qualified according to the intention of Bellcore (TA-TSY-000983) and supplied with final test data.

Connector Options

FC/PC

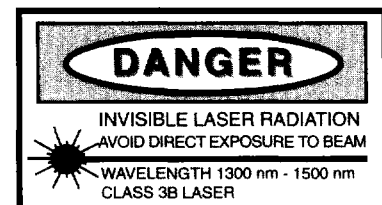
SC

(Other connectors available on request)

Different kinds of HF connectors may be supplied according to customer specification

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