

OKI Electronic Components

OAS2539-NV-WDM

FEDFOAS2539-01

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OC48 Optical Transmitter for DWDM

APPLICATION

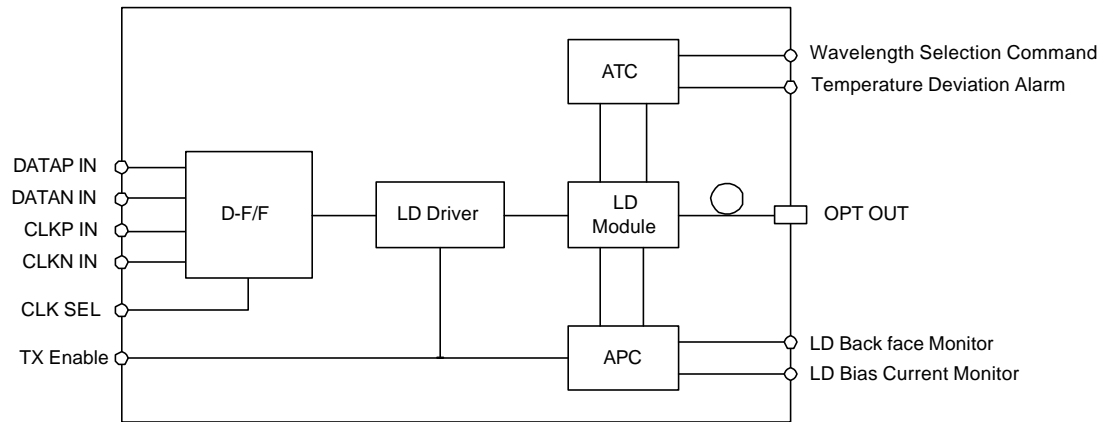
- SONET and ITU-T compliant at OC-48 and STM-16, 2.7Gbps w/ FEC for DWDM

FEATURES

- Center Wavelength range: 1528.77 to 1560.61nm ITU-T G.692 100GHz channel spacing
- High output Power +7dBm
- Selection of Clocked or non-clocked operation
- Selection of wavelength 1ch sifting
- Supply voltage: +3.3V and +5V

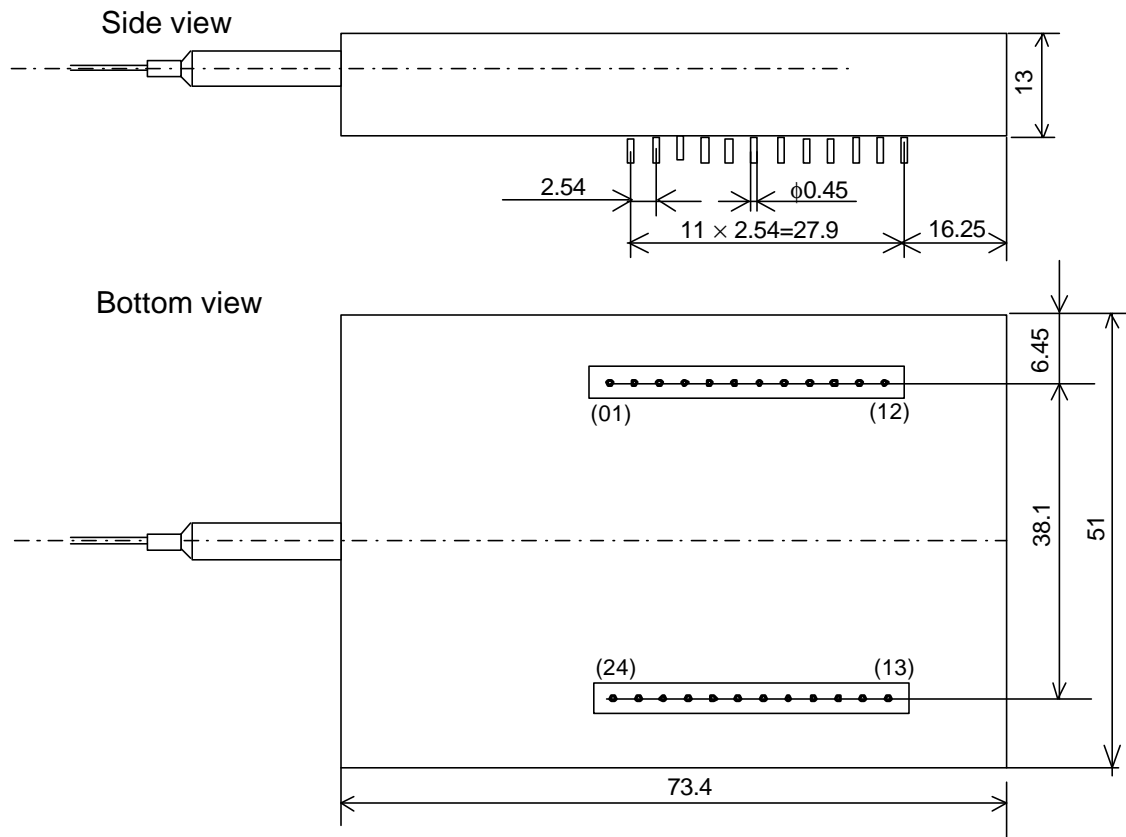
SPECIFICATION

Parameter	Unit	OAT12539-NV-WDM
Maximum Operating Bit rate	Gbps	2.7
Center wavelength range	nm	1528.77 to 1563.86
Wavelength channel spacing		ITU-T G.692 100GHz channel spacing
Center wavelength accuracy	nm	$\geq \pm 0.015$
Variation center wavelength over temperature	nm	$\geq \pm 0.05$
Mean launched power range	dBm	+6 to +8
Minimum extinction ratio	dB	≥ 8.2
Maximum spectral width	nm	≤ 0.4 (@ -20 dB)
Side mode suppression ratio	dB	≥ 30
Maximum Fiber Dispersion	ps/nm	≤ 1800
Dispersion penalty [3200ps/nm]	dB	≤ 2
Power consumption	W	5 (MAX)
Operating temperature	°C	-15 to +70
Dimension	mm	73.4 × 51 × 13

BLOCK DIAGRAM

PACKAGE OUTLINE

(Unit: mm)



PIN DESCRIPTIONS

No.	Symbol	Functionality
01	GND	Ground
02	LBFM	LD back face monitor
03	LBCM	LD bias current monitor
04	TxE	Tx enable
05	CSEL	Clock select
06	GND	Ground
07	TDA	Temperature deviation alarm
08	NC	No connect
09	NC	No connect
10	WSC	Wavelength selection command
11	GND	Ground
12	NC	No connect
13	VCC	Power supply (+5.0V)
14	VTEC	TEC supply voltage (+3.3V)
15	GND	Ground
16	DATAP	Positive data input
17	GND	Ground
18	DATAN	Negative data input
19	GND	Ground
20	CLKP	Positive clock output
21	GND	Ground
22	CLKN	Negative clock output
23	GND	Ground
24	VCC	Power supply (+5.0V)

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9. **Qualification and Reliability**
To help ensure high product reliability and customer satisfaction, OKI is committed to an intensive quality program that starts in the design phase and proceeds through the manufacturing process. Optical transceiver modules are qualified to OKI internal standards using MIL-STD-883 test methods and procedures and using sample techniques consistent with Telcordia requirements. This qualification program fully meets the intent of Telcordia reliability practices GR-468-CORE.
10. **Laser Safety**
All version of transceiver are Class 1 Laser products FDA complies with 21 CFR 1040.10 and 1040.11 requirements.
Also, all versions are Class 1 Laser products pre IEC 825-1.

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