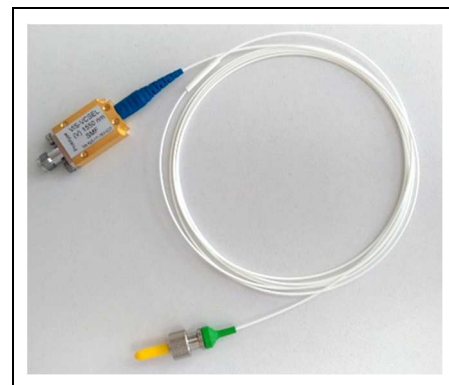


## Up to 25 Gbit/s VCSEL Single Mode Fiber-Coupled Module (1550 nm)



Sample image only. Actual product may vary

Product Code: V25-1550M

### Product Description

High-speed transmitter module for test purpose with integrated 1550nm VCSEL fiber coupled to a 9/125  $\mu\text{m}$  single mode fiber for optical output. The module is designed as engineering sample for high speed test applications.

### Features

- SMF Pigtail (9 $\mu\text{m}$  core, 1 m length)
- FC/APC optical output connector (N-Type)
- Anritsu V electrical connector

### Applications

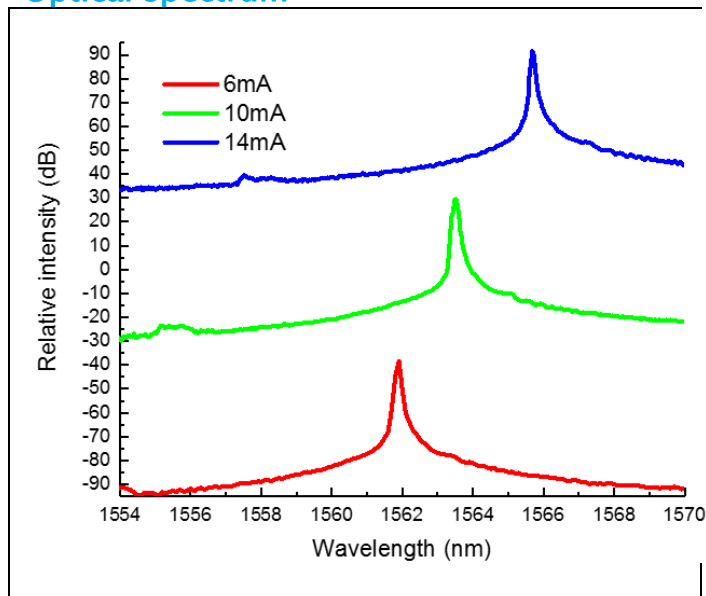
- Transmissions test
- Research and development

Parameter	
VCSEL type	Single mode
Emission wavelength	1550 nm
Data rate	Up to 25 Gbit/s
Peak output power	2.2 mW

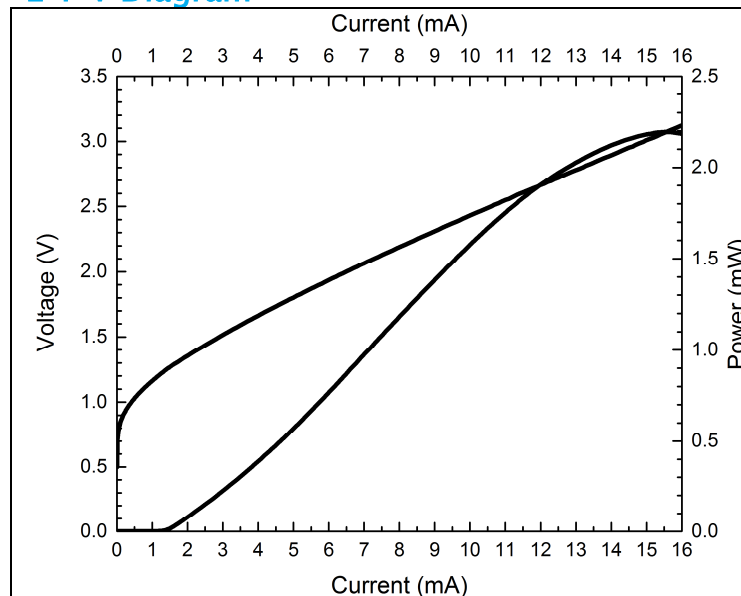
All product specifications and descriptions are subject to change without notice.

Please contact our sales department for additional information and to receive a quotation: [sales@v-i-systems.com](mailto:sales@v-i-systems.com)

### Optical spectrum



### L-I-V Diagram



### Electro-optical characteristics (at T<sub>case</sub> = 25 °C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Emission wavelength	$\lambda$		1550		1570	nm
Maximum data rate	BR	NRZ		25	30	Gbit/s
Bandwidth	BW ( $f_{3dB}$ )			13		GHz
Rise / Fall time	$\tau_R / \tau_F$	20%-80%		20 / 20		ps
Slope efficiency	$\eta$	5-10 mA	0.2		0.35	W/A
Threshold current	$I_{th}$				1.8	mA
Peak output power	$P_{max}$				2.2	mW
Optical spectrum				single mode		
Side mode suppression ratio	SMSR		25			dB

### Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Storage temperature	$T_{st}$	-40	+90	°C
Maximum forward current	$I_f$		16	mA
Maximum reverse voltage	$V_{rv}$		4	V

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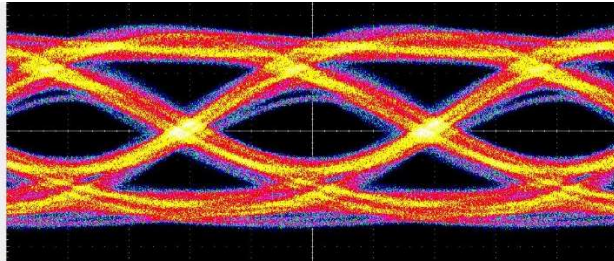
# Datasheet

## V25-1550M



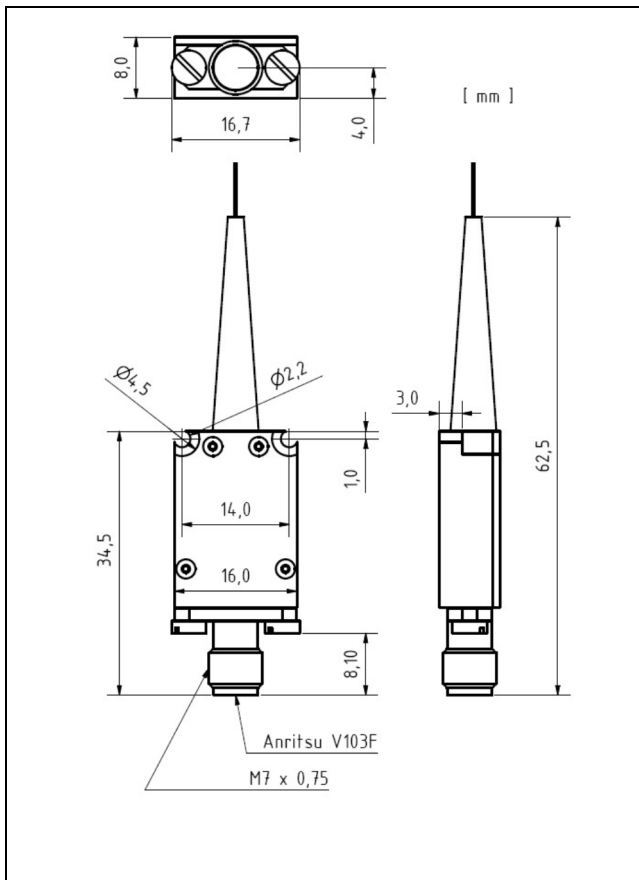
Vertically Integrated Systems

### Eye diagram at 25 Gbit/s

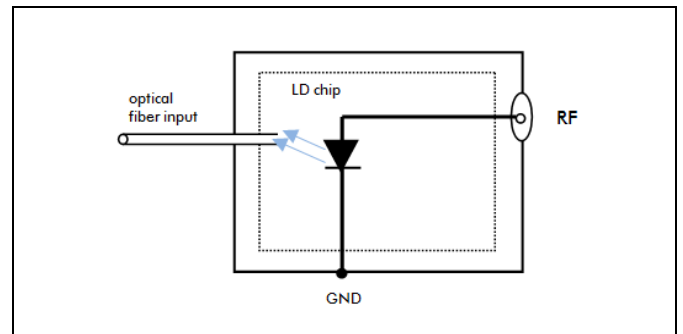


Receiver: Textronix 80C15-32 GHz

### Mechanical dimensions



### Schematic diagram



LASER RADIATION. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS CLASS 1M LASER PRODUCT



#### VI Systems GmbH

Hardenbergstrasse 7

10623 Berlin

Tel.: +49 30 3083143 30

Fax: +49 30 3083143 59

sales@v-i-systems.com

www.v-i-systems.com



www.facebook.com/VISystems

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[www.v-i-systems.com](http://www.v-i-systems.com)

VI Systems GmbH Hardenbergstrasse 7 D-10623 Berlin

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