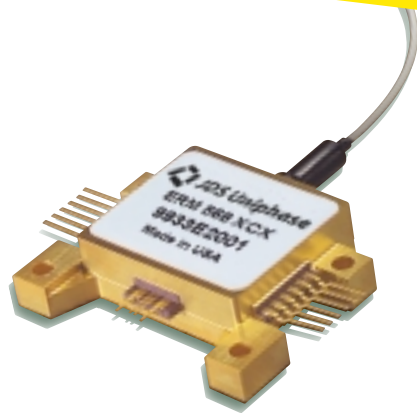


Product Bulletin



ERM 568XCX 10 Gb/s SONET/SDH PIN-TIA High Gain Optical Receiver Modules

Preliminary Specifications

Conditions (unless noted):

Temperature = 25°C, $\lambda = 1550$ nm, $R_L = 50\Omega$, $V_{ee} = -5.2V$, $V_{pd} = +5V$

All specifications without connector.

Parameter	Measurement Conditions	Min	Typ	Max	Units
PIN Responsivity	$\lambda = 1550$ nm	0.75	0.85		A/W
Bandwidth		8			GHz
Low Frequency Cut-off				85	KHz
Output Return Loss	130 KHz to 10 GHz		8		dB
Optical Return Loss				-27	dB
Sensitivity	10 Gb/s PRBS = $2^{31} - 1$ NRZ BER = 10^{-12}		-17	-15.5	dBm
Overload	10 Gb/s PRBS = $2^{31} - 1$ NRZ BER = 10^{-12}		0		dBm
Transimpedance		550			Ω
Power Dissipation				0.8	W

1. RF outputs are DC coupled for model 568XCX.

ERM 5x8 series are high speed receivers designed to meet the requirements of long and short haul 10Gb/s backbone and metro network architecture. The devices offer high bandwidth, high output return loss, linear gain, and are well suited for operations with optical amplifiers.

Key Features

Electro-optical

- Low dark current, low capacitance, InGaAs PIN photodiode with low noise transimpedance amplifier
- High bandwidth
- High gain

Packaging

- Coplanar package with single mode 900 μ m jacketed fiber pigtail
- Available with LC, SC or FC connectors

Applications

- Short haul receivers for SONET/SDH ADMs
- DWDM transponders and receivers
- Optical Cross-connects

ERM 568XCX 10 Gb/s SONET/SDH PIN-TIA | 2
High Gain Optical Receiver Module

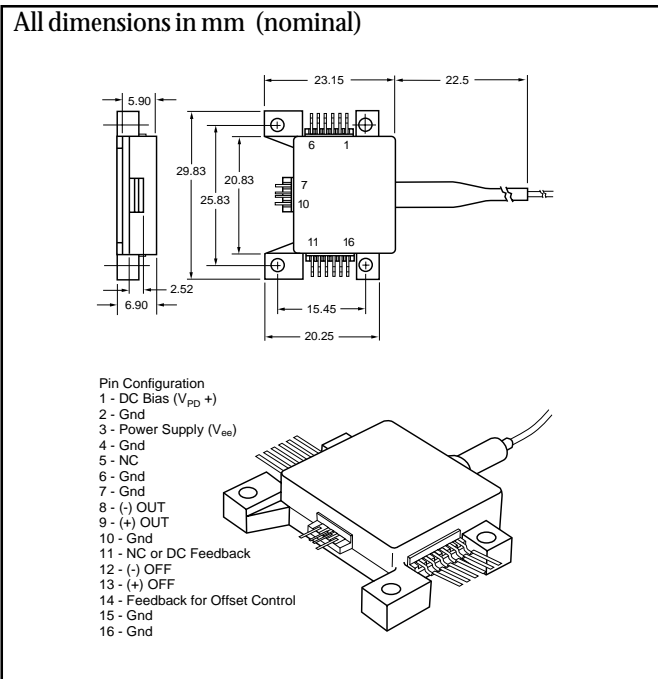
DC/Electrical Characteristics

Parameter	Min	Typ	Max	Units
Supply Voltage	-5.46	-5.2	-4.94	V
PD Supply Voltage	4	5	12	V

Maximum Ratings

Parameter	Min	Typ	Max	Units
Supply Voltage V_{ce}	-5.5		0	V
Supply Voltage V_{PD}	0		12	V
PD Forward Supply Current			2	mA
PD Reverse Supply Current			2	mA
Maximum Optical Input Power			3	dBm
Operating Case Temperature	0		70	°C
Storage Temperature	-40		85	°C

Mechanical Dimensions - ERM 568XCX



Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please print the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact your local JDS Uniphase sales representative or JDS Uniphase directly at 877-550-JDSU or visit our Web site at www.jdsuniphase.com.

Sample: ERM 568XCX LC

ERM 568XCX +

code	connector
LC	900 μ m buffer with LC connector
FCS	900 μ m buffer with FC/SPC connector
SCS	900 μ m buffer with SC/SPC connector

Quality Vision

We have a leadership position in the optoelectronic industry with a vision for excellence in quality. The company is committed to providing customers with the highest levels of quality and reliability in design and manufacturing. Quality Management Systems are certified to ISO 9000 standards, prioritizing continuous improvement and total customer satisfaction. Strict quality controls are maintained to ensure that all products meet or surpass customer requirements.

Precautions for Use

ESD protection is imperative. Use of grounding straps, anti-static mats, and other standard ESD protective equipment is required when handling or testing an InGaAs PIN or any other junction photodiode.

Soldering temperature of the leads should not exceed 260 °C for more than 10 seconds.

Fiber feed through tube temperature should not exceed 120 °C.

Fiber pigtailed should be handled with less than 10 N pull and with a bending radius greater than 1".



JDS Uniphase Corporation
 7 Graphics Drive
 West Trenton, NJ 08628

Tel 609 538-1800
 Fax 609 403-7350
jdsu.sales@us.jdsuniphase.com
www.jdsuniphase.com

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