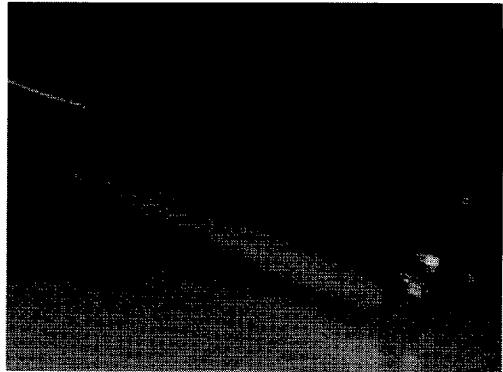


Description

The RCV5931AN is a lightwave receiver for OC-48.

Features

- Complied with SONET/SDH standard
- InGaAs APD
- Operation at 2488.32Mb/s for 1.3 μm or 1.55 μm wavelength
- 50 Ω , AC-coupled interface
- Clock recovery using SAW filter
- Loss-of-signal (LOS) indicator and photo-current monitors



Absolute Maximum Ratings

Item	Symbol	Rated Value	Units
Operating case temperature	T_{opr}	0 to 65	$^{\circ}\text{C}$
Storage case temperature	T_{stg}	-40 to 70	$^{\circ}\text{C}$
Supply voltages	V_{CC}	6.0	V
	V_{EE}	-6.0	
Lead soldering temperature	T_s	250	$^{\circ}\text{C}$
Lead soldering time	—	10	sec

Optical Characteristics $(T_a = 25^{\circ}\text{C}, \lambda = 1.3 \mu\text{m})$

Item	Symbol	Min	Typ	Max	Units	Test Conditions
Minimum received power	P_{inmin}	—	-32	-29	dBm	$2^{23} - 1$ NRZ, 10^{-10} BER
Maximum received power	P_{inmax}	-10	-9	—	dBm	$2^{23} - 1$ NRZ, 10^{-10} BER

4496205 0014501 364

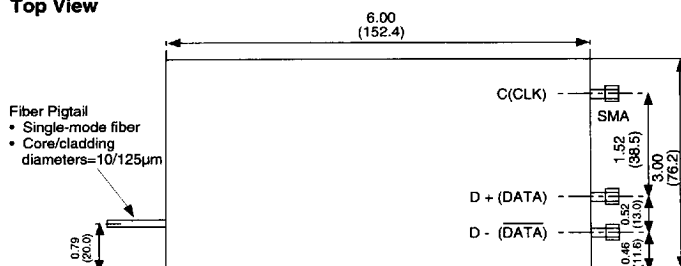
Part
378 **2**

HITACHI®

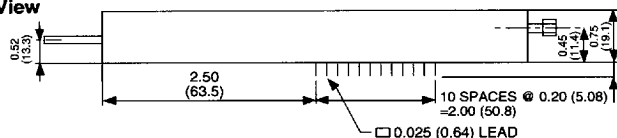
Hitachi America, Ltd. • 2000 Sierra Point Pkwy. • Brisbane, CA 94005-1835 • (415) 589-8300

Item	Symbol	Min	Typ	Max	Units	Test Conditions
DC power supply voltage	V_{CC}	4.75	5.0	5.25	V	
	V_{EE}	-4.94	-5.2	-5.46		
DC power supply current	I_{CC}	—	—	800	mA	$V_{CC} = 5.0\text{ V}$
	I_{EE}	—	—	800		$V_{EE} = -5.2\text{ V}$
Output rise and fall times	t_r, t_f	—	—	150	ps	20 to 80% (peak)
Clock and data amplitude	—	600	—	1000	mV _{pp}	50Ω load
Timing jitter (RMS)	—	—	—	3	deg	2 ²³ – 1 NRZ, Pin=-26dBm

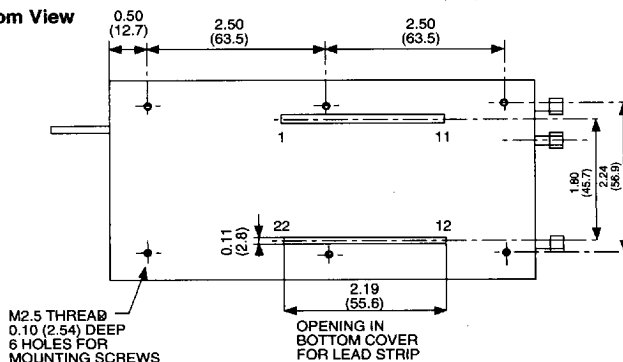
Top View



Side View



Bottom View



Pin	Description
1:	Ground
2:	LOS Indicator *
3:	Ground
4:	Photocurrent Monitor
5:	Ground
6:	No User Connection
7:	Ground
8:	No User Connection
9:	Ground
10:	No User Connection
11:	Ground
12:	Ground
13:	-5.2V
14:	Ground
15:	-5.2V
16:	Ground
17:	+5.0V
18:	Ground
19:	+5.0V
20:	Ground
21:	No User Connection
22:	No User Connection

- LOS Indicator goes to CMOS high level at the absence of optical signal input.

Tolerance: ± 0.012 in. (± 0.3 mm)
Dimension: inch (mm)

4496205 0014502 270

HITACHI®

Hitachi America, Ltd. • 2000 Sierra Point Pkwy. • Brisbane, CA 94005-1835 • (415) 589-8300

Part
2 379