

SDH/SONET Receiver Module

Description

The receiver module is designed for transmission systems and medium-to high-speed data communication applications with data rate up to 1300Mbps/s. Compact packaging with wide dynamic range makes this receivers ideal for both telecommunication and data communication applications. Manufactured in a 20-Pin DIP, the receiver module uses a planar, rear illuminated InGaAs PIN photodetector that allows it to be used with wavelength from 1.1 μm to 1.6 μm .

Characteristics(PT6XXX)

$V_{cc} = +4.75\text{V}$ to 5.25V , Output PECL signal

Parameter	OC-1			STM-1/OC-3			STM-4/OC-12			OC-24			Unit
	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
Data Rates	5	52	70	5	155	200	5	622	700	5	1250	1300	Mb/s
Sensitivity	-	-42	-40	-	-38	-35	-	-32	-30	-	-25	-23	dBm
Saturation	-3	0	-	-3	0	-	-3	0	-	-3	0	-	dBm
Signal Detect Assert Level	-50	-	-	-50	-	-	-40	-	-	-35	-	-	dBm
Signal Detect Deassert Level	-	-	-40	-	-	-35	-	-	-30	-	-	-23	dBm
SD Hysteresis	-	3	-	-	3	-	-	3	-	-	3	-	dB

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Units
Storage Temperature	T_{stg}	-40	+85	$^{\circ}\text{C}$
Operating Temperature	T_{op}	-40	+85	$^{\circ}\text{C}$
Input Voltage	-	GND	V_{cc}	V
Power Supply Voltage	$V_{cc}-V_{ee}$	0	+6	V
	V_{cc}	+4.75	+5.25	V
Lead Soldering Temperature/Time	T_{sld}	-	240/10	$^{\circ}\text{C}/\text{S}$



Features

- InGaAs PIN photodiode receiver
- Pigtailed and 20-pin DIP metal package
- PECL interface logic level
- Intermediate and long reach SDH/SONET compliance
- Meets the intent of Bellcore reliability practices
- Operating at 1.3 μm or 1.55 μm wavelengths

Applications

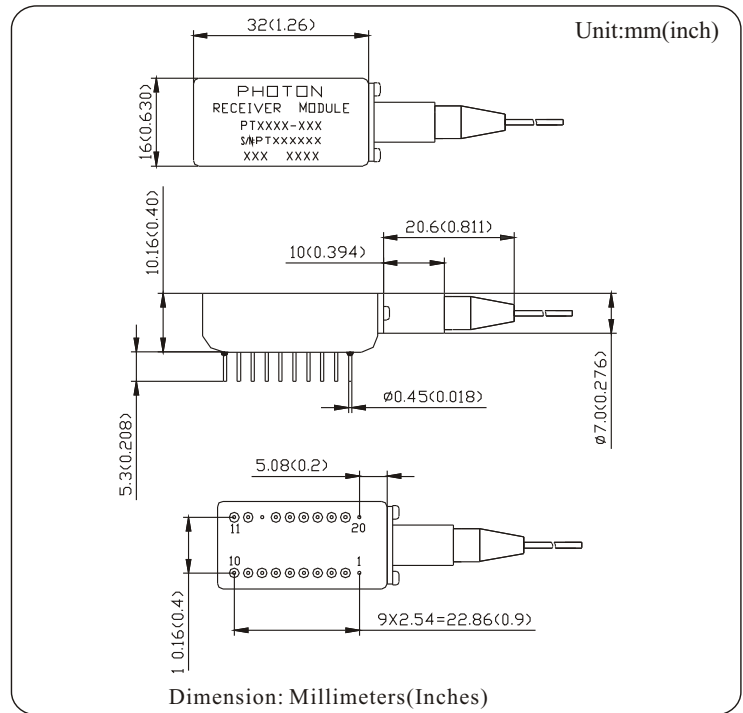
- ATM
- SONET/ SDH

SDH/SONET Receiver Module

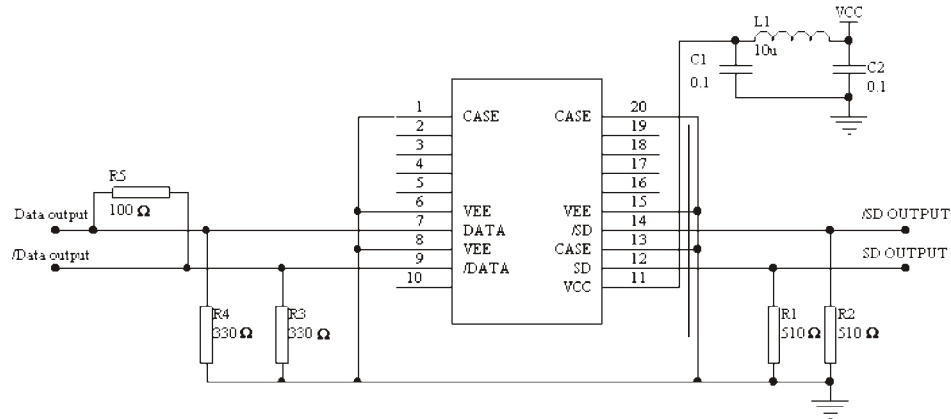
Pin Descriptions

Pin	Function	Pin	Function
1	Case	11	V _{cc}
2	NC	12	Signal Detect
3	NC	13	Case
4	NC	14	Signal Detect
5	NC	15	V _{EE}
6	V _{EE}	16	NC
7	DATA	17	NC
8	V _{EE}	18	NC
9	$\overline{\text{DATA}}$	19	NC
10	NC	20	Case

Mechanical Outline



Recommended Circuit



Ordering Information

PT 6



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Module Type

1: Without CDR
4: With CDR

Interface Logic Level

4: (P)ECL Data output,
(P)ECL SD output
5: (P)ECL Data output,
TTL SD output

Package Style:

3: Pigtailed and 20-pin DIP metal package

Typical Data Rate:

052: ~52 Mb/s
155: ~155 Mb/s
622: ~622 Mb/s
1250: ~1250 Mb/s

Connector Type

00 : Without connector
FC : FC connector
ST : ST connector
SC : SC connector