

DESCRIPTION

This is a direct coupled optical receiver designed for short distance 850 fiber optic systems. The receiver contains a monolithic IC, with an integral photodiode and amplification circuit and an Open Collector Schottky output.

ABSOLUTE MAXIMUM RATINGS

- Open Collector output
- Storage temperature..... -55°C to +125°C
- Case operating temperature... -40°C to +85°C
- Lead solder temperature..... 260°C, 10 seconds
- Supply Voltage..... +6 Volts

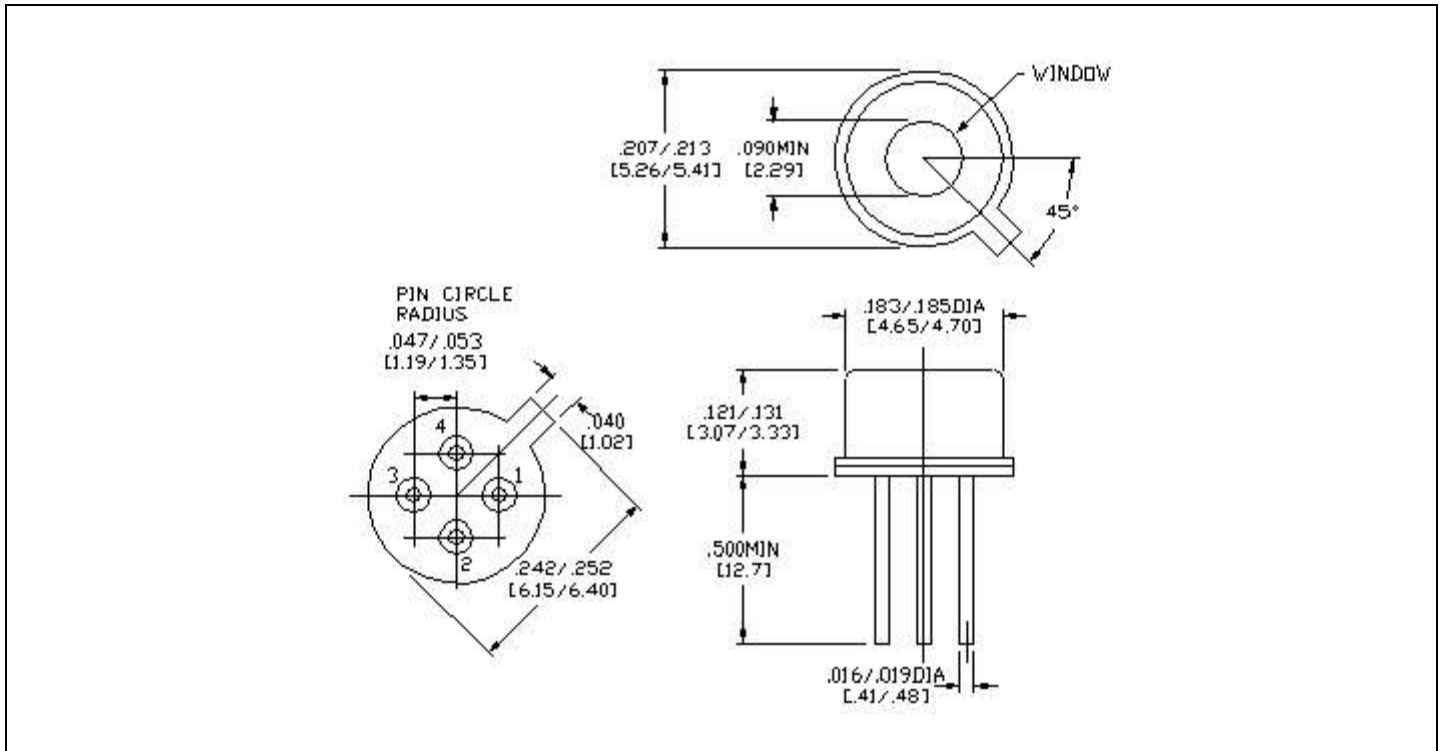
OPERATING CONDITIONS

- Supply Voltage..... +4.5 to +5.5 Volts
- Optical Input Power..... 3 to 100 μ W
- Optical signal pulse width..... <100 nsec
- Optical signal edges..... <20 nsec

ELECTRO-OPTICAL CHARACTERISTICS (Case T = 25°C)

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
High Level Logic Output Voltage	Pin \leq 0.1 μ W, RL=560 Ω	V _{OH}	2.4	4.5		Volts
Low Level Logic Output Voltage	Pin $>$ 3.0 μ W, RL=560 Ω	V _{OL}		0.25	0.5	Volts
Supply Current 1	Pin $>$ 3 μ W	I _{cc1}		13	15	mA
Supply Current 2	Pin \leq 0.1 μ W	I _{cc2}		4.5	6.5	mA
Minimum Input Sensitivity	λ =850 nm into 100/140 μ m Optical Fiber, f=2.5MHz 50%DC, PWD<10%	P _{in(peak)}		2.0	3.0	μ W
				-27.0	-25.2	dBm
Response Time	10%-90%, Pin \leq 10 μ W Vo=0.5 to 2.4V, RL=560 Ω	t _r t _f		6	9	nsec
				6	9	nsec
Pulse Width Distortion	f=2.5MHz, DC=50% Pin=3 μ W peak Pin=80 μ W peak	PWD		5	10	%
				25	35	%

OUTLINE DIMENSIONS



All dimensions are in inches (except as noted)
Pinout : 1. Vcc, 2. GND, 3. Output (TTL), 4. Case (GND)