



MPR0118 microwave photo receiver

The MPR0018 is a broadband microwave photoreceiver providing direct optical-to-analog RF conversion for signal remoting, communications, radar and information processing applications.

- 18 GHZ MICROWAVE BANDWIDTH**
- COMPACT LIGHTWEIGHT DESIGN**
- HIGH RESPONSIVITY**
- POSITIVE SUPPLY VOLTAGE**
- 50Ω OUTPUT IMPEDANCE**
- OPTIMIZED FOR MZM LINKS**

The unit consists of a high speed InGaAs PIN photodiode coupled to the RF output SMA connector. It includes internal bias decoupling and can operate over a wide range of supply voltages (+3 to +15V). The detector response covers 1300 to 1600nm. It is pigtailed with SMF-28 jacketed fiber and terminated with a variety of optical connector options (FC/APC standard).

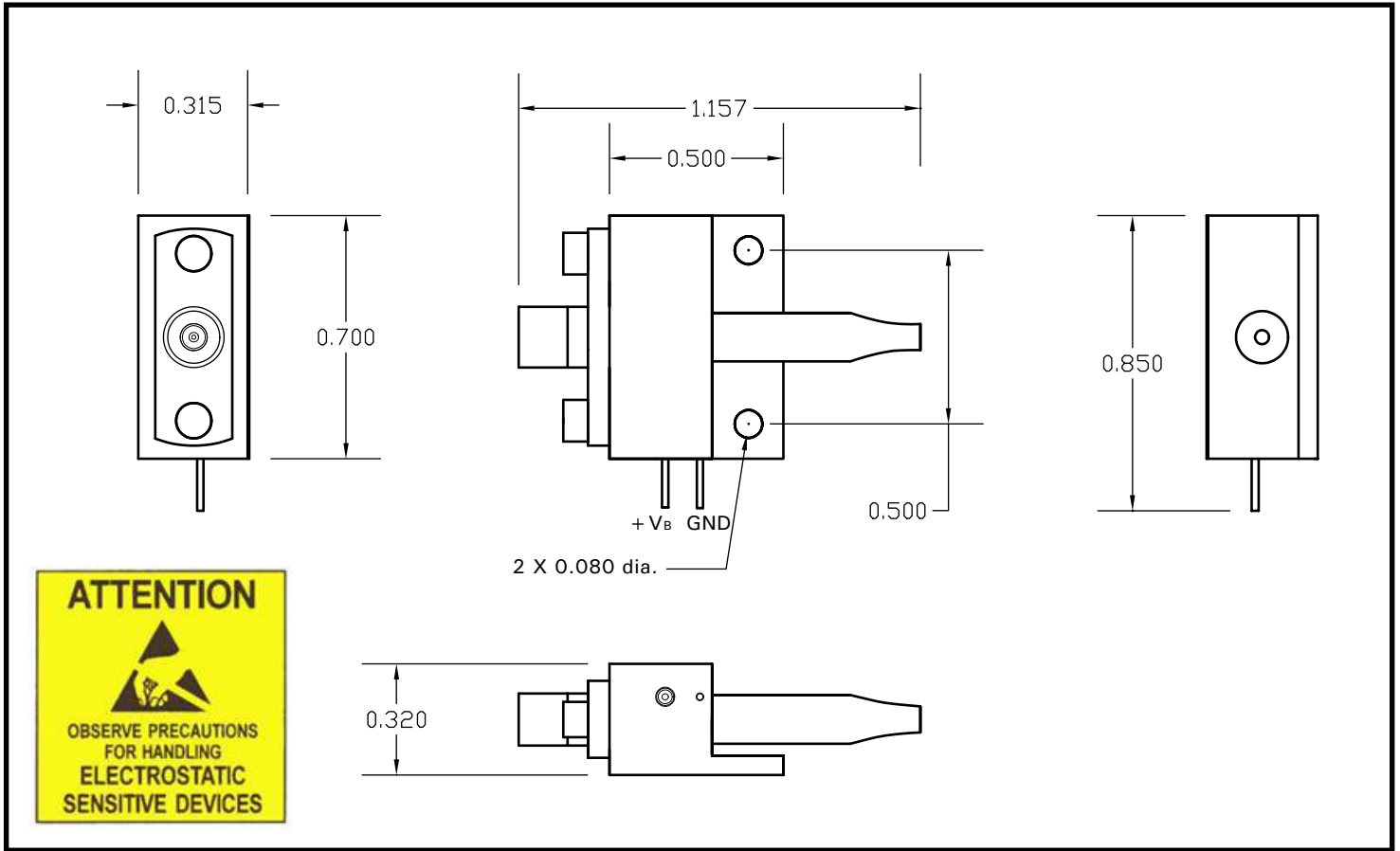
The entire unit is contained in a sealed housing and weighs less than 25 grams.

The RF response is tailored to provide gain equalization for typical mach zehnder modulator performance.

MPR0118 MICROWAVE PHOTORECEIVER SPECIFICATION

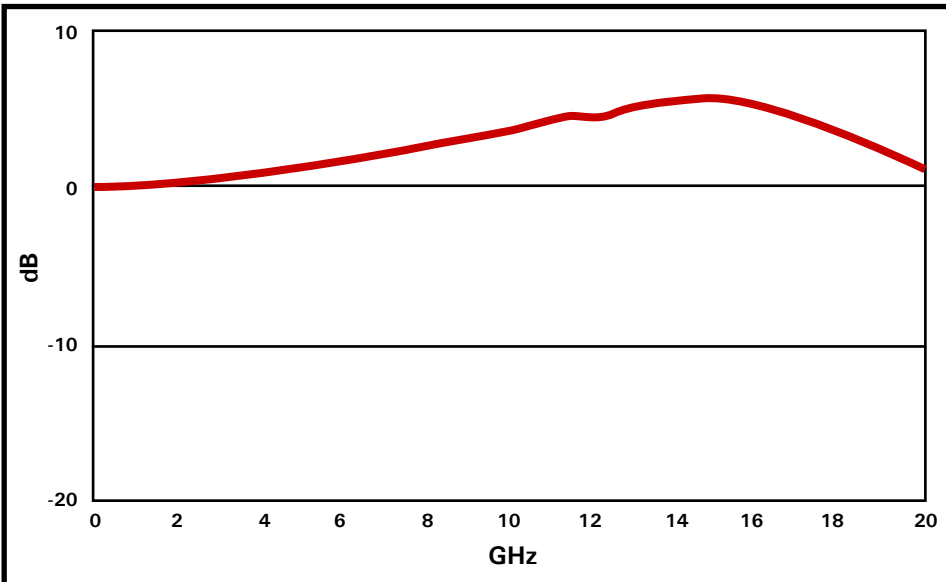
	MIN	TYPICAL	MAX	UNIT
RF CHARACTERISTICS				
RF Bandwidth	DC to 18			GHz
Output Impedance		50		Ohms
Output Return Loss		10		dB
Minimum RF -3 dB bandwidth relative to 250 MHz	18			GHz
OPTICAL CHARACTERISTICS				
Optical Wavelength	1300		1600	
Responsivity at 1550nm / 25 deg C	0.7	0.9		
Optical Input Power			7	mW
DC CHARACTERISTICS				
Bias Voltage	3		15	V
ENVIRONMENTAL CHARACTERISTICS				
Operating Temperature Range	-40		95	deg C
Storage Temperature Range	-40		95	deg C
MECHANICAL CHARACTERISTICS				
RF Connector	SMA Female Field Replaceable			
Fiber Pigtail	SMF-28			
Pigtail Length	1 meter typical			
Fiber Connector	FC/APC standard, other options available			
Bias Connector	0.018" diam. Sn/Pb coated kovar pins			
Weight	25 grams, maximum			

■ MPR0118 OUTLINE DRAWING



■ MPR0118 TYPICAL O/E RESPONSE

■ MPR0118 ORDERING INSTRUCTIONS



MPR0018 - C

C

FC/APC (default)

SC/APC

FC/PC

LC/PC

custom options available