



# MPR0020

## microwave photo receiver

The MPR0020 extends link response to 25 GHz via direct optical-to-analog RF conversion for signal remoting, communications, radar and information processing applications.

- >20 GHz MICROWAVE BANDWIDTH
- COMPACT LIGHTWEIGHT DESIGN
- HIGH RESPONSIVITY
- POSITIVE SUPPLY VOLTAGE
- 50Ω OUTPUT IMPEDANCE

The unit consists of a high speed InGaAs PIN photodiode coupled to the RF output 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).

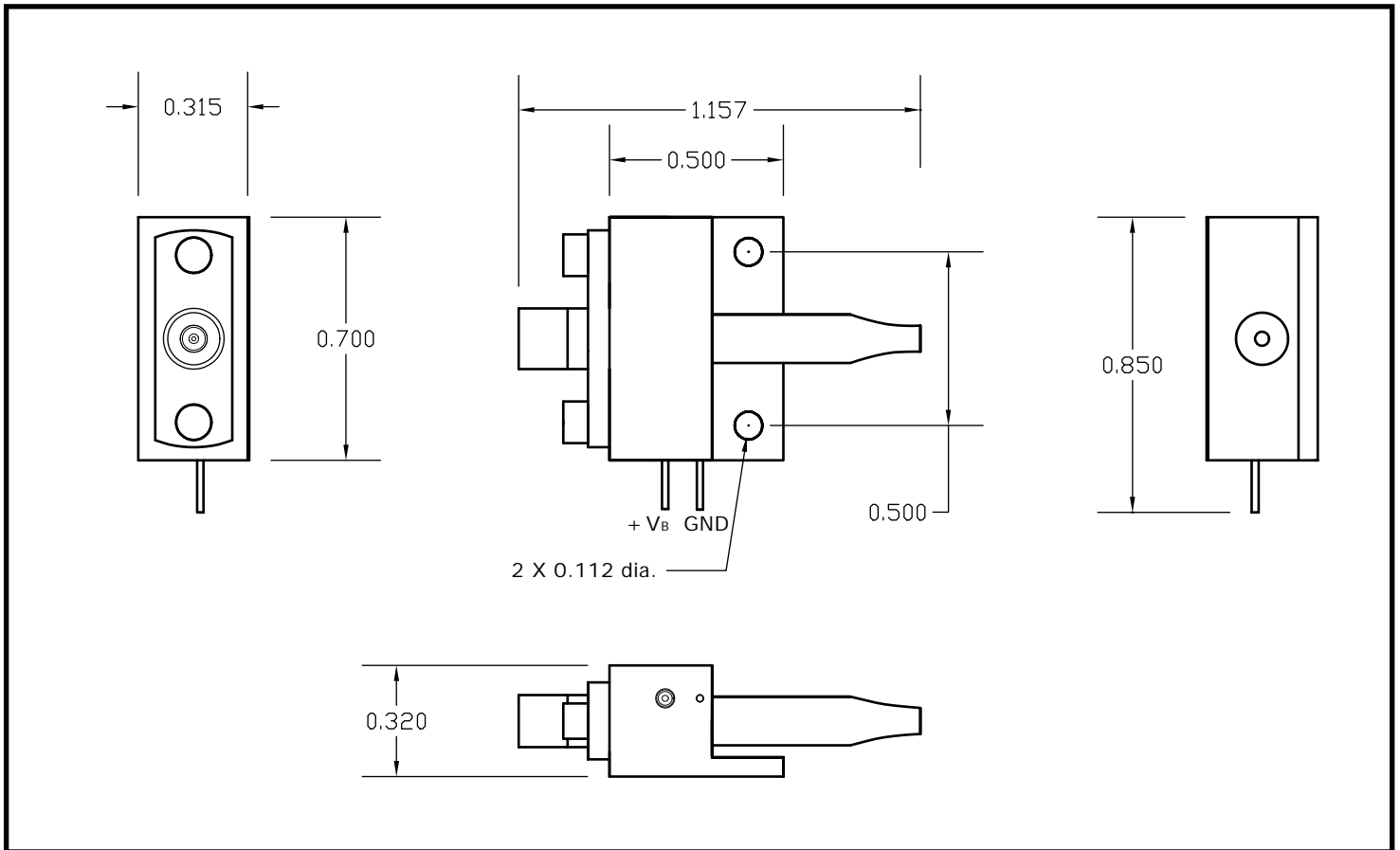
The entire unit is contained in a sealed housing and weighs less than 25 grams.

### MPR0020 MICROWAVE PHOTORECEIVER SPECIFICATION

	MIN	TYPICAL	MAX	UNIT
<b>RF CHARACTERISTICS</b>				
RF Bandwidth	DC to 20			GHz
Output Impedance		50		Ohms
Output Return Loss	8			dB
Minimum RF -3 dB bandwidth	20	25		GHz
<b>OPTICAL CHARACTERISTICS</b>				
Optical Wavelength	1300		1600	
Responsivity at 1550nm / 25 deg C	0.7	0.9		
Optical Input Power			10	mW
<b>DC CHARACTERISTICS</b>				
Bias Voltage	3		15	V
<b>ENVIRONMENTAL CHARACTERISTICS</b>				
Operating Temperature Range <i>NOTE 1</i>	-20		85	deg C
Storage Temperature Range	-40		95	deg C
<b>MECHANICAL CHARACTERISTICS</b>				
RF Connector	3.5mm 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			

**NOTE 1: MILITARY TEMPERATURE RANGE AVAILABLE. CONSULT FACTORY.**

■ MPR0020 DIMENSIONS DRAWING



■ MPR0020 TYPICAL O/E RESPONSE

