

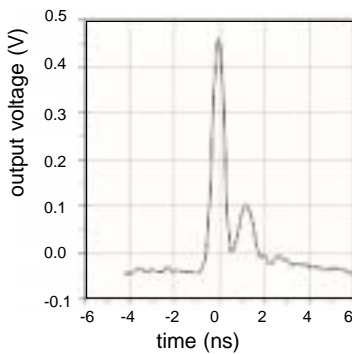
APD110 High Sensitivity Detector Unit

Our High Sensitivity Detector Unit features an avalanche photodiode with a bias voltage supply and a RF-amplifier all in one compact module. It has been designed for best performance when detecting small signals in the range from 1 - 800 MHz.

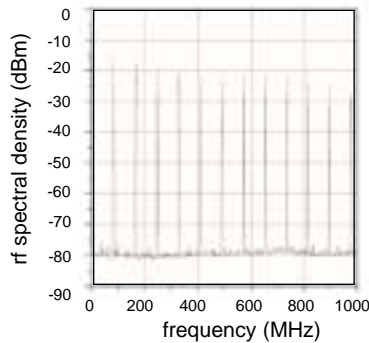
The High-Sensitivity-APD has been designed to detect beat signals between weak lasers. It is used with great success in our optical frequency synthesizer FC8003 to detect the offset beat signal and beat signals with external sources. Note that the output of the module is AC coupled.

Parameter	Value	Unit
Supply Voltage	+15 ±0.5	V
Current Consumption . . .	110	mA
Max Incident Power . . .	10	mW
Operating Temp	20-26	°C
Spectral Range	400-1000	nm
Detector Diameter	0.5	mm
Frequency Range	1-800	MHz
Output Impedance	50	Ω
Connectors	BNC	n/a

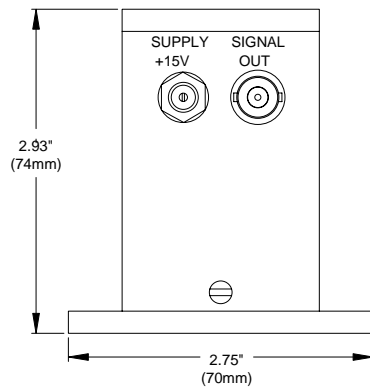
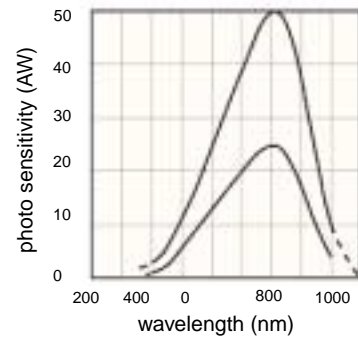
Pulse response of a 20 fs pulse at 800nm



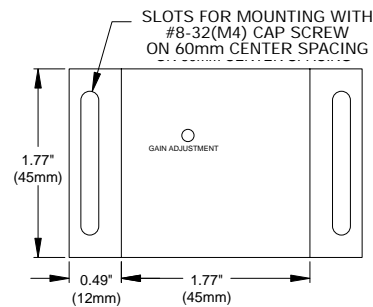
A fs pulse train at 80MHz repetition rate was incident on the module



Spectral response of the photo diode with an internal amplification of 50 and 100.



SIDE VIEW



TOP VIEW