

FP1015c

50 GHz High-Power Photodetector



Product Brief

FEATURES

- 50 GHz bandwidth
- Compact, low-profile package
- Single-mode fiber input

APPLICATIONS

- RF Photonic Links
- Photonic RF Generation
- Sensing
- Communications

Notes

1. Device is unterminated for high power applications.
2. This design requires an external bias tee.
3. Measurements taken for specification were performed at 20°C and -3 V bias into a 50 Ω load, at a wavelength of 1550nm.

OVERVIEW

The FP1015c high-power photodetector is designed for high-power, wide-bandwidth applications. This device has a compact, low-profile package with a single-mode SF28 fiber connection and a 1.85 mm “V” type female RF connector. This product has been developed for high optical power applications such as RF photonic links, sensing, and photonic generation of RF signals up to 50 GHz.

The specifications shown below describe the FP1015c model. Options are available to customize our high-power photodiode product to your specific application that may demand responsivity, RF power, or bandwidth performance to be optimized. An option for an integrated bias tee is in development.

SPECIFICATIONS

Parameter		Value	Unit
Wavelength Range (Optimum)	min	1280	nm
	max	1620	nm
Responsivity	min	0.1	A/W
Bandwidth	min	50	GHz
Output RF Power (Saturation, P _{1-dB})	min	13	dBm
Dark Current	max	100	nA
Operating Temperature	min	-5	°C
	max	75	°C

