

1.2 GHz Fiber Optic Detectors



DET02AFC

Specifications

ITEM #	DET02AFC(/M)	DET01CFC(/M)
Detector	Si	InGaAs
Wavelength Range	400 – 1100 nm	800 – 1700 nm
Bandwidth	1.2 GHz	
Max. Peak Power	18 mW	70 mW
Peak Response	0.46 A/W @730 nm	0.95 A/W @1550 nm
Rise Time	50 ps	100 ps
Fall Time	250 ps	100 ps
NEP @1550 nm	9.5×10^{-15} W/√Hz	1.5×10^{-15} W/√Hz
Dark Current	50 pA (500 pA Max)	0.7 pA (2.5 nA Max)



DET01CFC

Thorlabs DET02AFC and DET04CFC are biased fiber optic detectors that offer bandwidths of 1.2 GHz. Both feature FC/PC-terminated fiber inputs. The DET02AFC utilizes a silicon detector, which is sensitive to light in the 400 to 1100 nm spectral region, while the DET01CFC has an InGaAs detector for operation from 800 to 1700 nm. Post mounting is possible via the 8-32 (M4 x 0.7) mounting hole.

Features

- Fast Detectors with 50 or 100 ps Rise Time
- 1.2 GHz Bandwidth
- FC/PC Fiber Connectors
- SMA Output Connectors

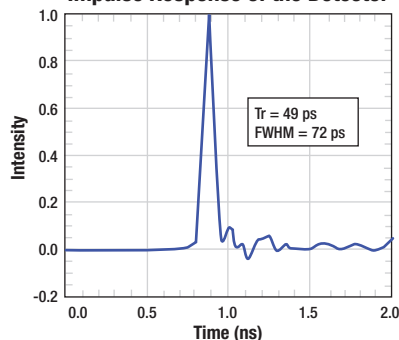
ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
DET02AFC	DET02AFC/M	\$ 269.00	£ 193.68	€ 234.03	¥ 2,143.93	High-Speed Si Detector, 400 – 1100 nm
DET01CFC	DET01CFC/M	\$ 289.00	£ 208.08	€ 251.43	¥ 2,303.33	High-Speed InGaAs Detector, 800 – 1700 nm

2 and 5 GHz Optical Detector Packages

These Silicon and InGaAs Photodetector Packages provide the same ease of use as our popular DET family of products. They are manufactured with state-of-the-art microwave-qualified parts. Each unit is individually tested to ensure compliance with our specifications; a complete test report comes with every serialized detector package.

SV2-FC
Fiber InputSIR5-FC
Fiber Input

Impulse Response of the Detector



Specifications

ITEM #	SV2-FC	SIR5-FC
Material	Si	InGaAs
Bandwidth	2 GHz	5 GHz
Wavelength Range	320 – 1100 nm	900 – 1650 nm
Fiber Input	FC/PC	
Output Impedance	50 Ω	
Maximum Safe Output	2.5 V	1.0 V
Minimum Rise Time (Typical)	175 ps	70 ps
Dark Current	0.1 nA	1.5 nA @ 20 V

ITEM #	\$	£	€	RMB	DESCRIPTION
SV2-FC	\$ 574.00	£ 413.28	€ 499.38	¥ 4,574.78	Si Detector Package, 2 GHz FC Fiber Input, 320 – 1100 nm
SIR5-FC	\$ 1,013.50	£ 729.72	€ 881.75	¥ 8,077.60	InGaAs Detector Package, 5 GHz FC Fiber Input, 900 – 1650 nm
SBP20	\$ 73.00	£ 52.56	€ 63.51	¥ 581.81	20 V Replacement Battery Pack for SV2-FC and SIR5-VC

Terminators

50 Ω Terminator

Ideal termination for DET Series of detectors to achieve maximum bandwidth.



T4119

Variable Terminator

Adjust from 50 Ω to 50 kΩ in 7 discrete steps: 50 Ω, 100 Ω, 500 Ω, 1 kΩ, 5 kΩ, 10 kΩ, and 50 kΩ.



VT1

ITEM #	\$	£	€	RMB	DESCRIPTION
T4119	\$ 35.70	£ 25.70	€ 31.06	¥ 284.53	In-Line Terminator
VT1	\$ 139.00	£ 100.08	€ 120.93	¥ 1,107.83	Variable Terminator

See page 1640 for more BNC components and page 1642 for BNC cables.