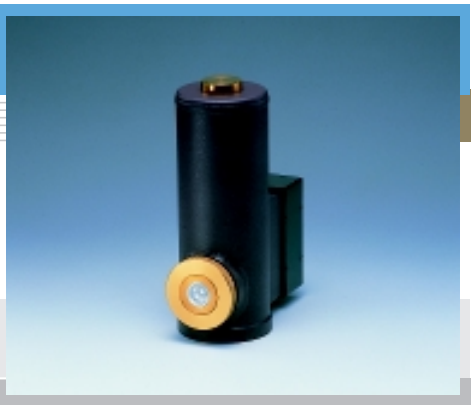
Infrared detector module with preamp
Metal dewar type



High sensitivity modules of easy-to-use

These devices combine a dewar type detector with a compatible preamplifier, and easily operate to detect infrared radiation just by connecting to a DC power supply. InGaAs, InSb and MCT (HgCdTe) detectors are provided as standard devices (liquid nitrogen cooling). Custom-designed devices with different active areas, FOV or amplifier gain, etc. are also available to meet your specific needs.

Features

- Compact integral detector unit
- Optimum connections between the detector element and pre-amplifier allow amplified signals to be easily obtained.

Applications

- Infrared detection

Accessories (Supplied)

- 4-conductor cable (for DC power supply): 2 m (connector installed at one end) A4372-02
- BNC-BNC coaxial cable (for signal output): 2 m E2573
- Instruction manual

■ Specifications / Absolute maximum ratings

Type No.	Detector element	Active area (mm)	External input voltage (V)	Absolute maximum ratings		
				External input voltage (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
G7754-01	InGaAs	φ1	±Vs *1	±18	0 to +40	-20 to +50
G7754-03		φ3				
P7751-01	InSb	φ0.6				
P7751-02		φ2				
P7752-10	MCT	1 × 1	±15			

*1: Vs=12 to 15 V

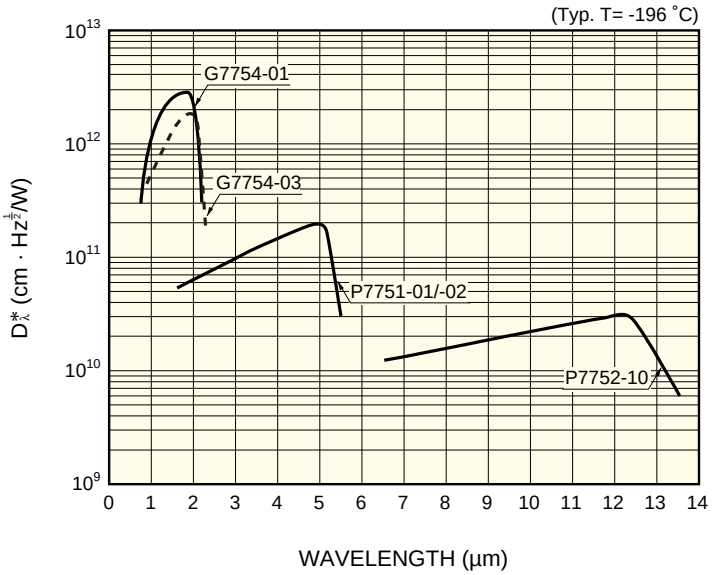
■ Electrical and optical characteristics (Typ.)

Type No.	Measurement condition: Element temperature T (°C)	Peak sensitivity wavelength λp (μm)	Cut-off wavelength λc (μm)	Photo sensitivity S λ=λp (V/W)	NEP (W/Hz$^{1/2}$)	Frequency response -3 dB (Hz)	Output impedance (Ω)	Maximum output voltage RL=1 kΩ (V)	Maximum current consumption *2 (mA)
G7754-01	-196	2.0	2.4	2×10^9	3×10^{-14}	2 to 500	50	±10	±15
G7754-03				5×10^8	1.5×10^{-13}	2 to 500		±10	±15
P7751-01		5.3	5.5	3×10^8	3×10^{-13}	5 to 10000		±10	±20
P7751-02				1.5×10^8	1×10^{-12}	5 to 12000		±10	±20
P7752-10		12	14	2×10^6	3×10^{-12}	5 to 140000		±3	+60, -10

*2: Vs=15 V

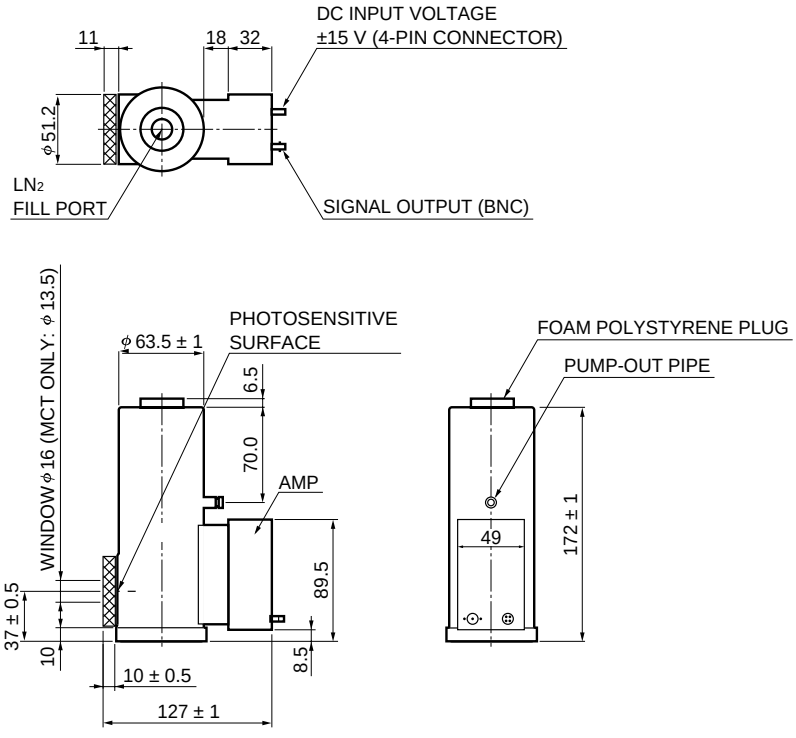
SOLID STATE DIVISION

■ Spectral response



KIRDB0076EC

■ Dimensional outline (unit: mm)



KIRDA0010EC

■ Precaution for use

- The detector should not be placed horizontally during use.
- Using these detectors in an environment subjected to vibration may cause microphonic noise. Take measures to prevent vibration as needed.

HAMAMATSU

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions.
Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2007 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K., Solid State Division
1126-1 Ichino-cho, Higashi-ku, Hamamatsu City, 435-8558 Japan, Telephone: (81) 53-434-3311, Fax: (81) 53-434-5184, www.hamamatsu.com
U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218
Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658
France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10
United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777
North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01
Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741

Cat. No. KIRD1024E04
Feb. 2007 DN