

The C7319 which furnishes current-to-voltage conversion circuit is designed for use with current sources like photomultiplier tubes.

The C7319 has three switchable conversion ratios; 10^5 , 10^6 and 10^7 volts per ampere and also has two switchable bandwidth selections.

The performances are convenient to such an application as requiring a low noise and high gain preamplifier.

FEATURES

- 10^5 , 10^6 and 10^7 V/A conversion ratios
- 20 kHz and 200 kHz bandwidth with switch selecting
- Adjustable offset level with VR included
- Operable with wide supply voltage : ± 5 V to ± 15 V

MAXIMUM RATINGS

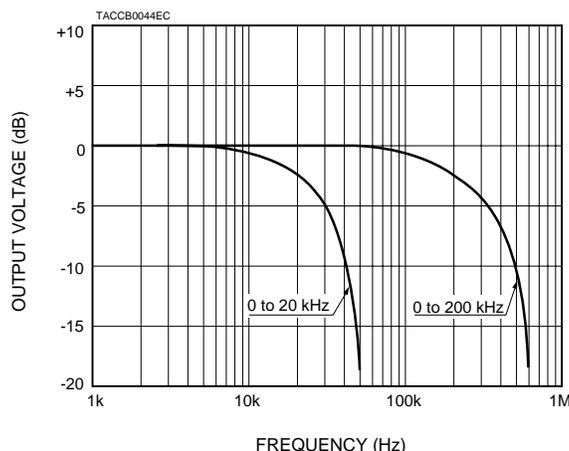
Parameter	Value	Unit
Supply Voltage	± 18	Vdc
Operating Temperature	0 to +40	°C
Storage Temperature	-20 to +60	°C

CHARACTERISTICS

Parameter	Conversion Ratio			Unit
	10^5 V/A	10^6 V/A	10^7 V/A	
Supply Voltage	± 5 to ± 15			Vdc
Supply Current (at ± 15 V)	± 8			mA Typ.
Current to Voltage Conversion Factor	10^5	10^6	10^7	V/A
Maximum Output Voltage with no load resistor (at ± 15 V)	13			V
Output Voltage with 50 Ω load resistor	2			V
Maximum Input Signal Current (at ± 15 V)	130	13	1.3	μ A
Frequency Bandwidth (-3 dB)	0 to 20 or 0 to 200 *			kHz Typ.
Input Polarity	Positive/Negative			-
Amplifying Method	Inverted Output			-
Output Impedance	50			Ω
Equivalent Noise Input (rms)	0 to 20 kHz	1.5	0.2	nA Typ.
	0 to 200 kHz*	3.0	0.6	
Case Material	Aluminum			-
Weight	170			g

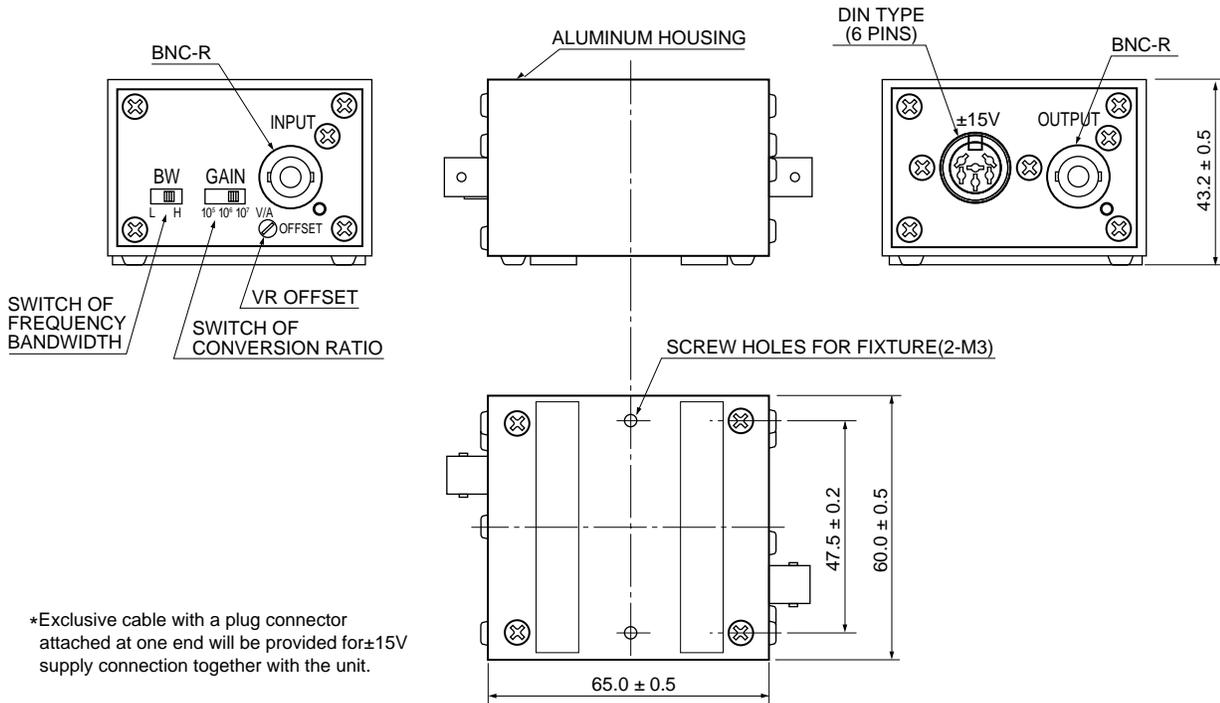
NOTE : *Only in selecting 10^7 V/A conversion ratio, to be limited to 0 to 100 kHz frequency bandwidth.

Figure 1: Frequency Response



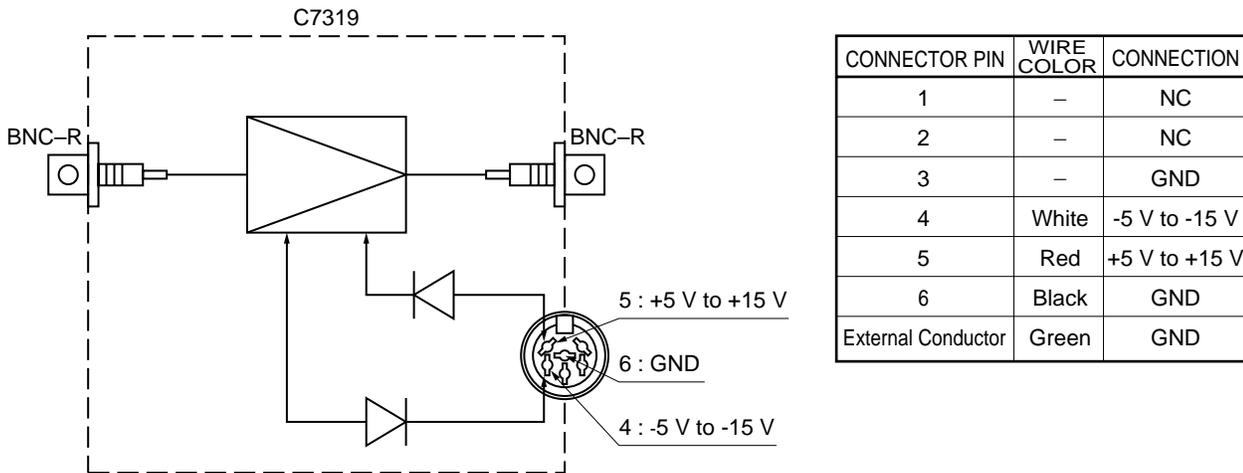
PREAMPLIFIER UNIT C7319

Figure 2: Dimensional Outlines (Unit : mm)



TACCA0174EA

Figure 3: Internal Connection Diagram



TACCC0102EB

HAMAMATSU

HOME PAGE URL <http://www.hamamatsu.com>

HAMAMATSU PHOTONICS K.K., Electron Tube Center

314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

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 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 8, 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 E-mail: france@hamamatsu.com

United Kingdom: Hamamatsu Photonics UK Limited: Lough Point, 2 Gladbeck Way, Windmill Hill, Enfield, Middlesex EN2 7JA, United Kingdom, Telephone: 44(20)8-367-3560, Fax: 44(20)8-367-6384 E-mail: info@hamamatsu.co.uk

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 E-mail: info@hamamatsu.se

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 E-mail: info@hamamatsu.it

TACC1014E03
JUN. 2000 IP
Printed in Japan (500)