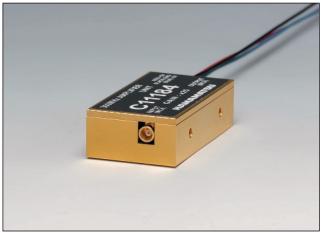


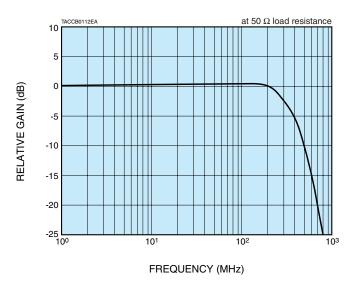
# WIDE BANDWIDTH AMPLIFIER UNIT

The output signal from a photomultiplier tube can be directly input to the C11184 and it provides a voltage output signal with 50  $\Omega$  load at a conversion factor of 1.25 mV/ $\mu$ A. It can be used as a wide bandwidth amplifier not only for a photomultiplier tube but also for other detectors, or simply as a wide bandwidth amplifier.



Accessory (Supplied): MCX-BNC Adapter (2pcs)

Figure 1: Typical Frequency Response



**FEATURES** 

Wide Bandwidth: DC to 300 MHz
Current-to-voltage Conversion Factor: 1.25 mV / μA at 50 Ω load resistance
Rise Time: 1.2 ns (Typ.)

•Non-inverting Output

Compact · Light Weight

MCX Connector

## SPECIFICATIONS

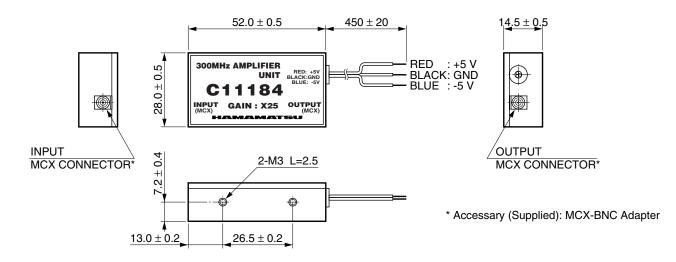
Par	<b>Description / Value</b>				
Frequency Bandwidth (-3 dB)			DC to 300 MHz		
Voltage Gain <sup>®</sup>			$28 \text{ dB} \pm 2 \text{ dB}$		
	(Approx. 25 times)				
Current-to-voltage	Load Resistance: 1 M $\Omega$		2.5 mV/μA		
Conversion Factor	Load Resistance: 50 $\Omega$		1.25 mV/μA		
Rise Time		1.2 ns			
Input Polarity	Positive / Negative				
Amplifying Metho	Non-inverting Output				
Input Impedance	50 Ω				
Recommended L	50 Ω				
Maximum Output	Load Resistance	±2 V Min.			
Signal Voltage	Load Resistance: 50 $\Omega$		±1 V Min.		
Output Noise Vol	1 mV rms				
	Input		MCX-R <sup>®</sup>		
Connector	Output		MCX-R <sup>®</sup>		
	Power		DIN (6-pin)		
Power Supply Voltage			±5 V		
Max. Power Supp	±6.5 V				
Power Supply Cu	±70 mA				
Operating Tempe	0 °C to +40 °C				
Storage Tempera	-15 °C to +60 °C				
Weight			Approx. 40 g		

**NOTE:** A Load Resistance: 50  $\Omega$ 

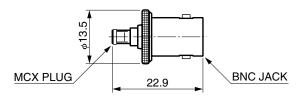
**BMCX-BNC** adapter is supplied

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office. 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. ©2011 Hamamatsu Photonics K.K.

## Figure 2: Dimensional Outlines (Unit: mm)



MCX-BNC Adapter (2 pcs) (SUPPLIED)



Please consult our sales office when there is on uncertain point about the connection terminal

TACCA0303EA

## RELATED PRODUCTS /

## **AMPLIFIER UNITS SELECTION GUIDE**

Parameter	C7319	C9999	C6438	C6438-01	C9663	C11184	C5594
Frequency Bandwidth (-3 dB)	DC to 20 kHz or DC to 200 kHz (switchable)		DC to 50 MHz	DC to 50 MHz	DC to 150 MHz	DC to 300 MHz	50 kHz to 1.5 GHz
Current-to-Voltage Conversion Factor (Load Resistance: 50 Ω)	1 V/μΑ, 10 V/μΑ	50 mV/μA	0.5 mV/µA	25 mV/μA	4 mV/μA	1.25 mV/μA	3.15 mV/μA

## HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

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