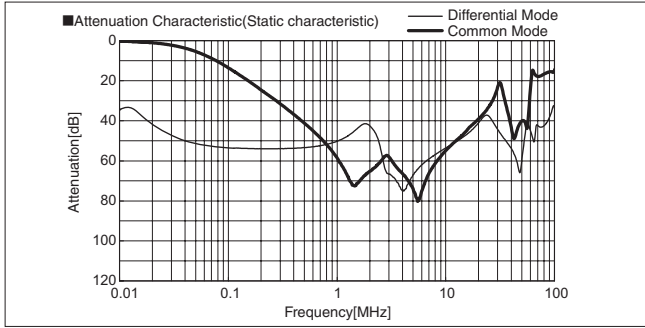
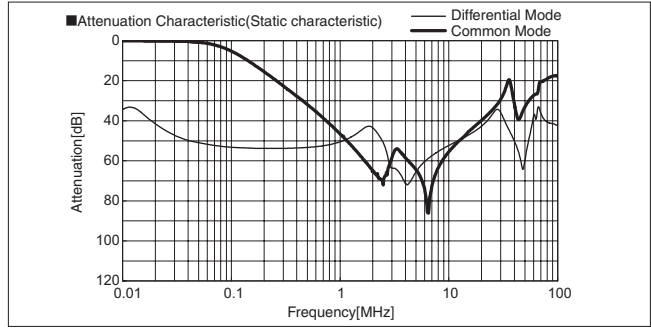


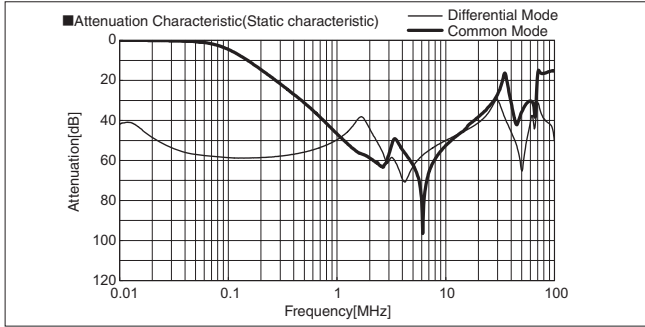
SNA-01-223



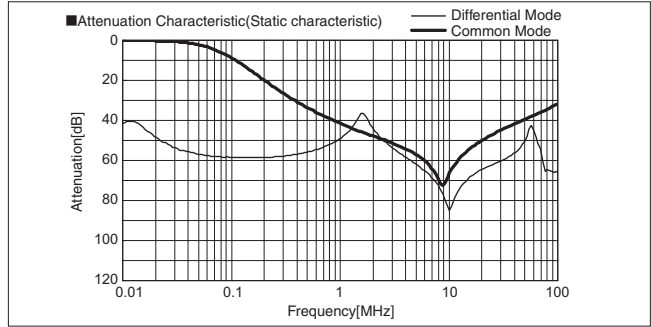
SNA-03-223



SNA-06-223



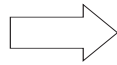
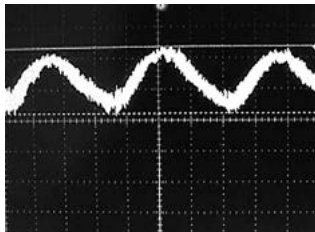
SNR-10-223



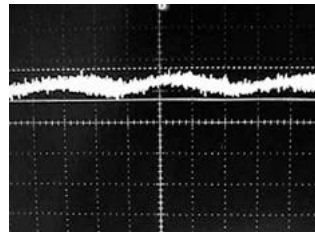
※ This product only reduces ripple noise of the switch mode power supply. It cannot be used effectively to reduce ripple noise at line frequency.

■ Example of attenuation output noise.

LCA10S-12

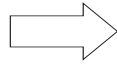
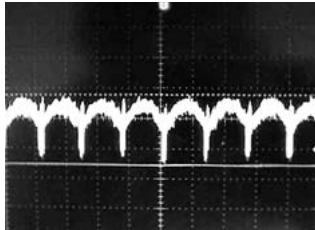


LCA10S-12+SNA-01-223

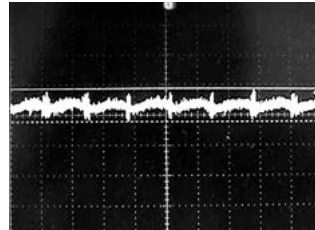


(Room temp, Room Humi)  
BW:500MHz  
LCA10S-12  
12V 0.9A

LCA30S-12

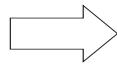
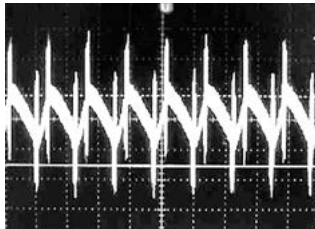


LCA30S-12+SNA-03-223

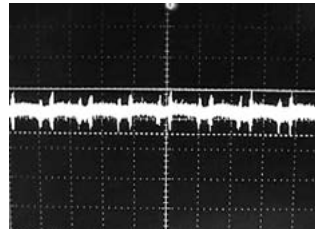


(Room temp, Room Humi)  
BW:500MHz  
LCA30S-12  
12V 2.5A

LCA50S-12

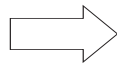
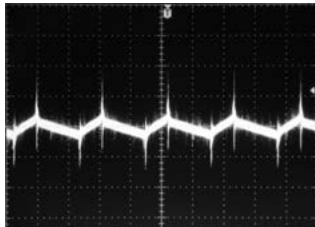


LCA50S-12+SNA-06-223

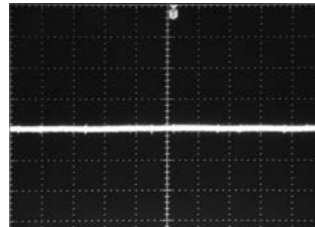


(Room temp, Room Humi)  
BW:500MHz  
LCA50S-12  
12V 4.3A

LEP240F-24



LEP240F-24+SNR-10-223



(Room temp, Room Humi)  
BW:500MHz  
LEP240F-24  
24V 10A

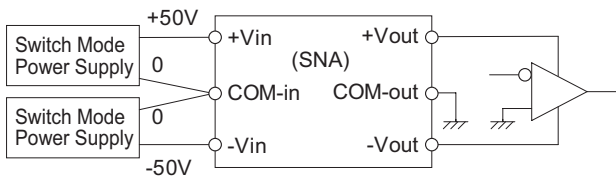
※ Measured by differential probe (KEISOKU-GIKEN:DP-100).

# 1 Wiring to Input/Output terminals

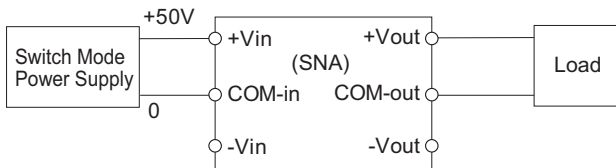
■ This filter uses polarized components (electrolytic capacitor), The filter will break if reverse voltage is applied to the input/output terminals. Please exercise caution when wiring.

# 2 Application examples

■ Power supply for an operational amplifier.



■ Single output power supply.



# 3 Safety Considerations

■ To apply for safety standard approval using this EMI/EMC Filter, the following conditions must be met.

- The unit must be used as a component of an end-use equipment.
- The unit must be used in the secondary circuit that is insulated from the primary circuit through double or reinforced insulation.
- The mounting plate (FG) must be connected to safety ground of end-use equipment.

# 4 Optional Parts

■ The harness for Input/Output of EMI/EMC Filter is available.

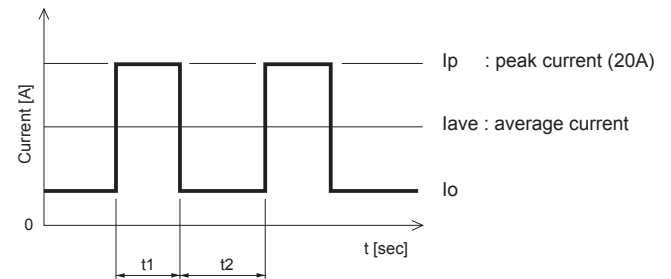
Model	Harness model
SNA-01	H-OU-8
SNA-03	H-OU-8
SNA-06	H-OU-9
SNR-10	H-OU-18

※ The same harness model applies to both input and output.

※ Sold in units of 1 piece.

# 5 Peak current (SNR)

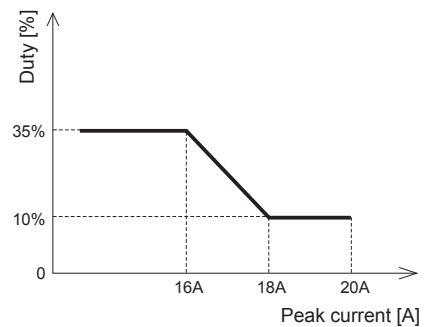
■ Peak current is possible to draw as below.



$$t1 \leq 10 \text{ [sec]}, I_{ave} = \frac{I_p \cdot t1 + I_o \cdot t2}{t1 + t2} \leq \text{rated current}$$

$$\frac{t1}{t1 + t2} \leq \text{Duty}$$

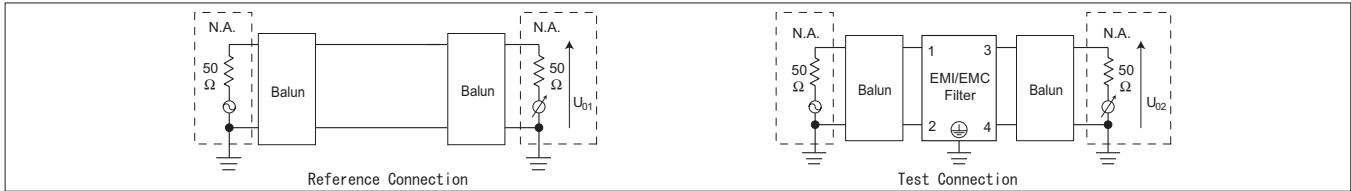
Duty is depended on peak current, refer to below chart.



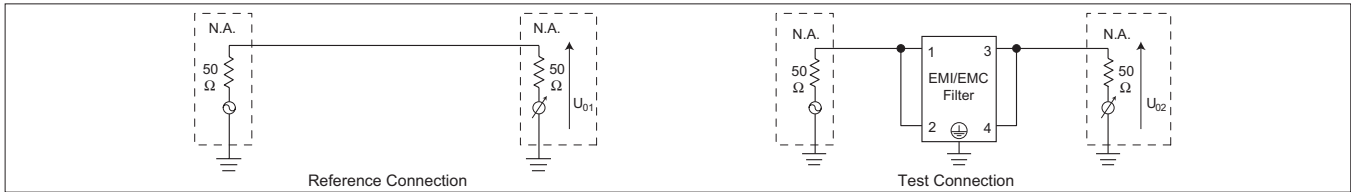
### (1) Attenuation Characteristic(Static characteristic)

※ Attenuation=  $20\log(U_{b1}/U_{b2})$ (dB)  
 $U_{b1}$ : Voltage in state without filters  
 $U_{b2}$ : Voltage in state which added filters  
 ※ N.A.: Network analyzer

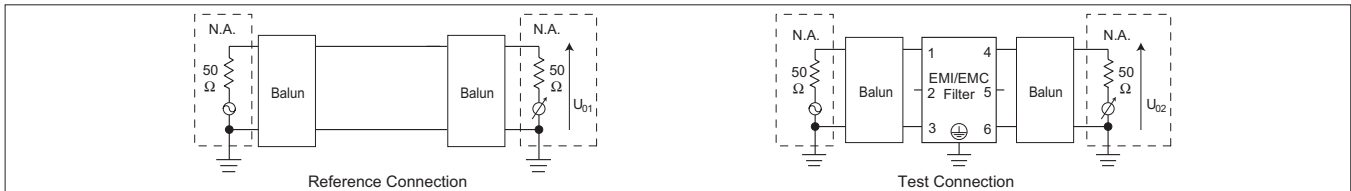
■ Object product : Single phase input type (Differential mode)



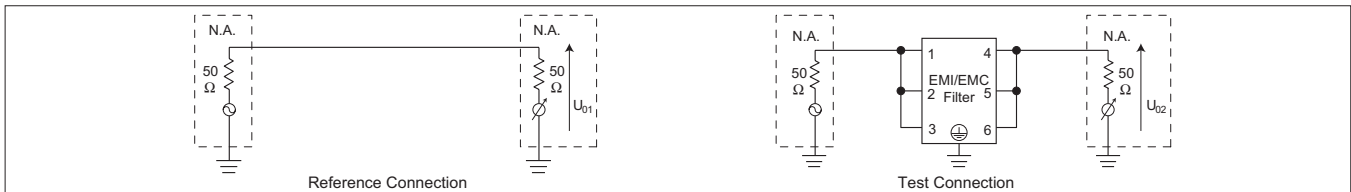
■ Object product : Single phase input type (Common mode)



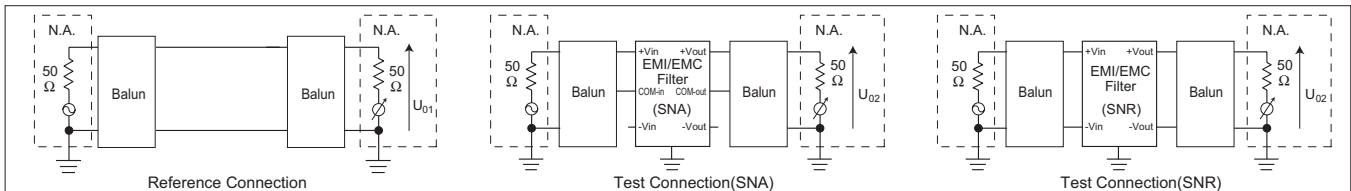
■ Object product : Three phase input type (Differential mode)



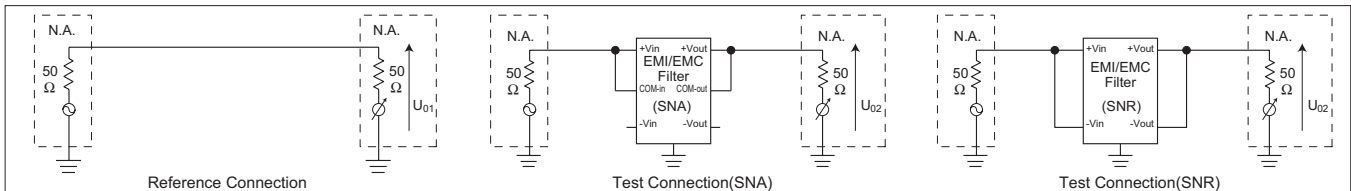
■ Object product : Three phase input type (Common mode)



■ Object product : DC input type (Differential mode)



■ Object product : DC input type (Common mode)



### (2) Pulse Attenuation Characteristic

