# **Current Probes**



**SS-270** DC-2MHz(Max 500Arms)

**SS-260** DC-10MHz(Max 150Arms)

**SS-250** DC-100MHz(Max 30Arms)

SS-240A DC-50MHz(Max 30Arms)

# A Full Line-up of High Current, Wide Bandwidth Current Probes

The high-speed switching power supply exerts enormous power over faithfully measuring waveforms.



# **Current Probes**

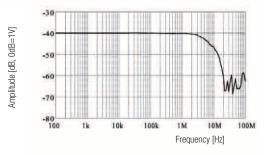
**SS-270** DC-2MHz(Max 500Arms)

**SS-260** DC-10MHz(Max 150Arms)

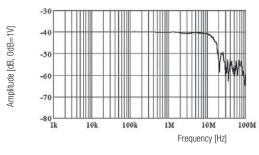


- Model performing a high current measurment of 150A and 500A
- Large caliber clamped current measurements
- Clamp type to enable measurements to be done easily without severing the circuit
- Equipped with a simple protection function for excessive input
- Can be used with measuring equipment without probe power supply (Probe power can be supplied with the optional PS-26 probe power supply)
- Uses a thin-film hole element for high sensitivity

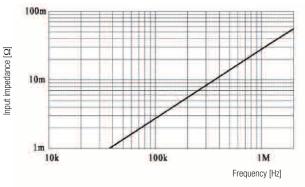
## Frequency Characteristics—Example (SS-270)



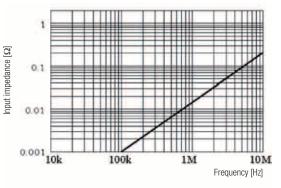




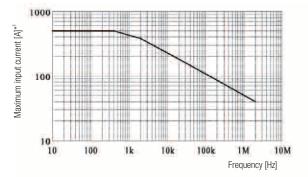
## Input Impedance Characteristics—Example (SS-270)



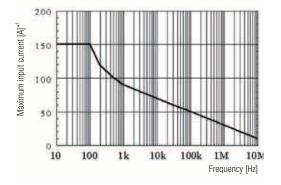
Input Impedance Characteristics—Example (SS-260)



Derating by Frequency (SS-270)



#### Derating by Frequency (SS-260)

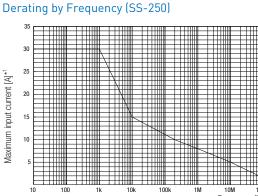


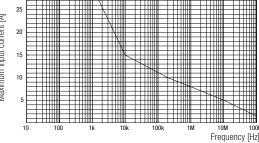


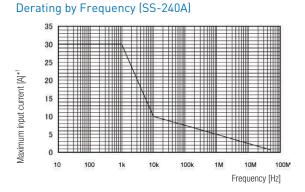
DC-50MHz(Max 30Arms)



- Model supporting a wide band frequency of DC to 100MHz (SS-250)
- Uses a thin-film hole element for high sensitivity and wide frequency bandwidth
- Low noise at 2.5mA rms (measured at a bandwidth of 20MHz)
- Equipped with a simple protection function for excessive input
- Can be used with measuring equipment without probe power sources (Probe power can be supplied with the optional PS-26 probe power supply)





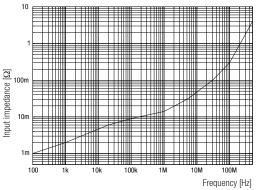


\*1 The current values (A) for the derating characteristics are the effective values (rms).

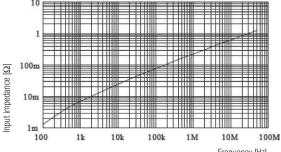
# Power Supply for the SS-270, SS-260, SS-250, SS-240A and SS-240\*1

A power source for current probes that can be used with oscilloscopes PS-26 that are not equipped with probe power sources.

#### Input Impedance Characteristics—Example (SS-250)



#### Input Impedance Characteristics—Example (SS-240A)



Frequency [Hz]



## **Specifications**

Compatible Current Probes	SS-270/SS-260/SS-250/SS-240A/SS-240*1		
Number of Power Connectors	2* <sup>2</sup>		
Output Voltage	±12V ±0.5V		
Output Current	Maximum 600mA (total value for all channels)		
Operation Temperature and Humidity Range	$0^{\circ}$ C to +40 $^{\circ}$ C, 80% RH or less (without condensation)		
Storage Temperature and Humidity Range	$-10^\circ$ C to $+50^\circ$ C, 80% RH or less (without condensation)		
Operation Altitude	Indoor up to an altitude of 2,000m		
Power Voltage	AC100V (can be set at 120V, 220V and 240V)(A voltage fluctuation of +/-10% has been taken into consideration for the power voltage), 50Hz/60Hz		

Power Consumption		Maximum 20VA	
Dimensions		Approx. 73H x 110H x 186D mm	
Weight		Approx. 1.1kg (excluding accessories)	
Compatible Rating	Safety	EN61010-1:2001	
	EMC	Contamination level 2 EN61326-1:2006, EN61000-3-2:2000, EN61000-3-3:2008	
Accessories		Power Cord (1), Instruction Manual (1), Spare Fuse (1) - factory default at 100V/120V: F1.0 AL/250V fuse - factory default at 220V/240V: F0.5 AL/250V fuse	

\*1: Discontinued model

\*2: In PS-26 current probe power cannot be used for two current probes simultaneously if the suppling current exceeding 600mA or higher.

# Specifications

		SS-270	SS-260	SS-250	SS240A		
Frequency Band		DC - 2MHz (-3db)	DC - 10MHz (-3db)	DC - 100MHz (-3db)	DC - 50MHz (-3db)		
Maximum	Maximum Current Range	500Arms	150Arms	30Arms			
Permissible Input Current	Maximum Peak Current	700A peak with non-repetitive current	300A peak with non-repetitive current	50A peak with non-repetitive current			
Output Sensitivity		0.0	1V/A	0.1V/A			
Guaranteed Sensitivity*		Up to 500Arms, DC or AC45Hz to 66Hz; +/-1.0% of reading +/-5mV More than 500Arms and less than 200Apack, paper prostition: 200Apack, paper approximately and less than 200Apack, paper approximately a		Up to 30Arms, DC or AC45Hz to 66Hz; +/-1.0% of reading +/-1mV More than 30Arms and less than 50Apeak, non-repetitive; +/-2.0% of reading			
		700Apeak, non-repetitive; +/-2.0% of reading	300Apeak, non-repetitive; +/-2.0% of reading	*All sensitivity and accuracy are specified as the probe independently.			
Noise		25mArms or less (measured with an oscilloscope at the 20MHz bandwidth)		2.5mArms or less (measured with an oscilloscope at the 20MHz bandwidth)			
Power Consumption		7.2VA max	5.5VA max	5.3VA max	5.6VA max		
Power supply Voltage		±12V ±0.5V	±12V ±1V	±12V	±0.5V		
Operation Temperature and Humidity		0°C to +40°C, 80% RH or less (without condensation)					
Storage Temperature and Humidity		-10°C to +50°C, 80% RH or less (without condensation)					
Operation Altitude		Indoors at an altitude of 2,000m or less (with an atmospheric pressure of approx. 79kPa)					
Effects of External Magnetic Fields		Equivalent of a max. 800mA (in an alternating magnetic field of DC or 60Hz, 400A/m)	Equivalent of a max. 150mA (in an alternating magnetic field of DC or 60Hz, 400A/m)	Equivalent of a max. 5mA (in an alternating magnetic field of DC or 60Hz, 400A/m)	Equivalent of a max. 20mA (in an alternating magnetic field of DC or 60Hz, 400A/m)		
Maximum Operation Circuit Voltage		600V, CAT II, 300V CAT III (insulated conductor)		300V, CAT I (insulated conductor)			
Measureable Cable diameter		ø20mm or less		ø5mm or less			
Cable Length	Sensor Cable	Approx. 2m		Approx. 1.5m			
	Power Cable	Approx. 1m		Approx. 1m			
Size	Sensor	Approx. 176W x 69H x 27D mm		Approx. 175W x 18H x 40D mm			
	Termination	Approx. 27W x 55H x 18D mm		Approx. 27W x 55H x 18D mm			
Weight		Approx. 520g	Approx. 500g	Approx. 240g	Approx. 230g		
Comformity	Safety	EN61010-2-032:2002 B type Measurement categories II, III (expe Contamination level 2	cted transient overvoltage 4000V)	EN61010-2-032:2002 Measurement category I (expected excessive overvoltage 1,500V) Contamination level 2			
	EMC	EN61326 - 1: 2006					
Accessories		Instruction Manual (1), Case (1)					

\* All specification and accuracy are performed taken at 23 °C +/- 5 °C and power-on 30 minutes.

