

#### Rogowski Coil Current Probes SS-280A series SS-620 series SS-290 series

# **Best for high current measurements**

### SS-280A series

Frequency bandwidth : 30MHz Temperature range (Sensor) : -40°C to 125°C Peak voltage : 1.2kV, max. Coil length : 80mm Coil diameter : 1.7mm, max.

30A	60A	120A	300A	600A	1,200A	3,000A	6,000A	12,000A
peak	peak							
SS-281A	SS-282A	SS-283A	SS-284A	SS-285A	SS-286A	SS-287A	SS-288A (made to order)	



### SS-620 series

Frequency bandwidth : 20MHz(SS-62xM) 25MHz(SS-62xS\*) Temperature range (Sensor) : -40°C to 125°C Peak voltage : 5kV, max. Coil length : 200mm(SS-62xM) 100mm(SS-62xS\*) Coil diameter : 3mm, max.

Coll diameter : 3mm, max.



\*Under development

## SS-290 series

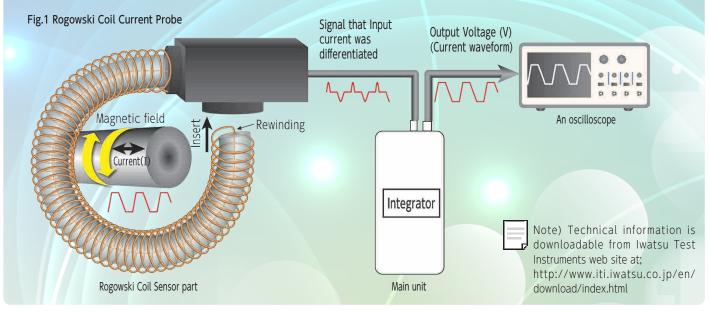
Frequency bandwidth : 10MHz(SS-29xL) 20MHz(SS-29xS) Temperature range (Sensor) : -40°C to 125°C Peak voltage : 10kV, max. Coil length : 700mm(SS-29xL) 300mm(SS-29xS) Coil diameter : 8.5mm, max.

1,200A	3,000A	6,000A	12,000A
peak	peak	peak	peak
SS-293L	SS-294L	SS-295L	SS-296L
SS-293S	SS-294S	SS-295S	SS-296S

#### Principle of Rogowski Coil Current Probe

Rogowski Coil Current Probe measures current through placing a coil around the current flow to be measured (the coil loop) and detecting a change in magnetic flux generated by the current flow to be measured. According to Ampere's law, in the Rogowski Coil, commonly known that the integration of flux along with closed loop measured as current magnetic field is equal to the current that flows inside of Rogowski coil.

As Rogowski Coil is shown in Fig.1, a wire is wound evenly like a coil on a core in a spiral configuration and the last turn rewound into the coil center.



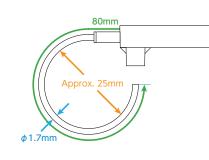
# SS-280A series

Frequency bandwidth: **30MHz** Temperature range(Sensor): **- 40°C to 125°C** Peak voltage: **1.2kV** Coil length: **80mm** Coil diameter: **1.7mm, max.** 

30A peak	SS-281A
60A peak	SS-282A
120A peak	SS-283A
300A peak	SS-284A
600A peak	SS-285A
1,200A peak	SS-286A
3,000A peak	SS-287A
6,000A peak	SS-288A (made to order)
12,000A peak	SS-289A (made to order)

#### SS-280A series specifications

#### Sensor close-up



% 60mm length also available. Contact our sales representatives



Probing example



	Frequency bandwidth	Temperature	Sensitivity	Peak current	Peak di/dt	Noise level	Absolute maximum di/dt	
Model	[-3dB]	range (Sensor)	[mV/A]	[A]	[kA/µs]	[mV rms]	Peak [kA/µs]	RMS [kA/µs]
SS-281A	110Hz to 30MHz		200	30	2	3.5		1.0
SS-282A	65Hz to 30MHz		100	60	4	2.5		
SS-283A	32Hz to 30MHz		50	120	8	2.0		1.5
SS-284A	9Hz to 30MHz		20	300	20			1.5
SS-285A	6Hz to 30MHz	-40℃ to 125℃	10	600	40	1.8	80	
SS-286A	3Hz to 30MHz	1250	5	1,200				
SS-287A			2	3,000	80			2.0
SS-288A(made to order)	2Hz to 30MHz		1	6,000	00	1.4		2.0
SS-289A(made to order)			0.5	12,000				

## SS-620 series

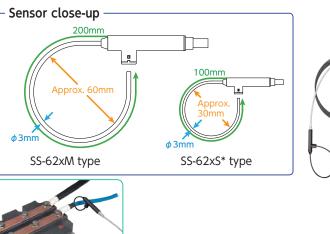
Frequency bandwidth: 20MHz (SS-62xM) 25MHz (SS-62xS\*)

Temperature range(Sensor): -40°C to 125°C Peak voltage: 5kV, max.

Coil length: 200mm (SS-62xM) 100mm (SS-62xS\*)

Coil diameter: 3mm, max.

600A peak	SS-625M / SS-625S*
1,200A peak	SS-626M / SS-626S*
3,000A peak	SS-627M / SS-627S*
6,000A peak	SS-628M / SS-628S*
12,000A peak	SS-629M / SS-629S*







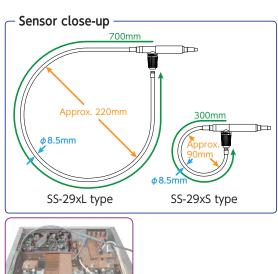
SS-620 series specifications

	Frequency bandwidth	Temperature range	Sensitivity	Peak current	Peak di/dt	Noise level	Absolute ma	ximum di/dt
Model	[-3dB]	(Sensor)	[mV/A]	[A]	[kA/µs]	[mV rms]	Peak [kA/µs]	RMS [kA/µs]
SS-625M	2Hz to 20MHz		10	600	32	5.0		
SS-625S*	2Hz to 25MHz		10	000	40	5.0		
SS-626M	1Hz to 20MHz	-40°C to 125°C	5	1,200	60	3.5		
SS-626S*	1Hz to 25MHz		5	1,200	80	5.5		3.0
SS-627M	0.8Hz to 20MHz		2	3,000		2.0	80	
SS-627S*	0.8Hz to 25MHz		Z	3,000		2.0	00	
SS-628M	0.6Hz to 20MHz		1	6,000	80	1.4		
SS-628S*	0.6Hz to 25MHz		I	0,000	00	1.4		
SS-629M	0.4Hz to 20MHz		0.5	12,000		1.2		
SS-629S*	0.4Hz to 25MHz		0.5	12,000		1.2		
*under development	*under development							

# SS-290 series

Frequency bandwidth: 10MHz (SS-29xL) 20MHz (SS-29xS) Temperature range(Sensor): -40°C to 125°C Peak voltage: 10kV, max. Coil length: 700mm (SS-29xL) 300mm (SS-29xS) Coil diameter: 8.5mm, max. 1,200A peak SS-293L / SS-293S

-2302 / 00-2300
-294L / SS-294S
-295L / SS-295S
-296L / SS-296S





Probing example

SS-290 series specifications								
Model	Frequency bandwidth [-3dB]	Temperature range (Sensor)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/µs]	Noise level [mV rms]	Absolute ma Peak [kA/µs]	ximum di/dt RMS [kA/µs]
SS-293L	1Hz to 10MHz		5	1,200	32	3.5		
SS-293S	1Hz to 20MHz		5	1,200	60	5.5		
SS-294L	0.8Hz to 10MHz		2	3,000		2.0		
SS-294S	0.8Hz to 20MHz	-40°C to	2	3,000		2.0	80	3.0
SS-295L	0.6Hz to 10MHz	125°C	1	6,000	80	1.4	00	5.0
SS-295S	0.6Hz to 20MHz		I	0,000	00	1.4		
SS-296L	0.4Hz to 10MHz		0.5	12,000		1.2		
SS-296S	0.4Hz to 20MHz		0.5	12,000		1.2		

#### **Common specifications**

			SS-280A series	SS-620 series	SS-290 series				
S		sitivity uracy	±	2%(-10°C to 70°C) 50ppm/°C at out of above range	± 2%(-10°C to 60°C) + additional ± 300ppm/°C at out of above range				
ation	Connector		Connector : BNC						
<b>Basic Specifications</b>	Output	Voltage range, max.	± (	5V (load ≧ 100kΩ) ※ ± 2V at 50ohm	$\pm$ 6V (load $\geq$ 100k $\Omega$ )				
Basi	Line	arity		±0.05% of full scale					
	Zero	o Adj. range		± 300mV or above					
Dimer	ensions	Approx. 25mm	200mm Approx. 60mm 0.3mm SS-62xM type SS-62xS* type	Approx. 220mm 08.5mm SS-29xL type SS-29xS type					
Sensor coil	Coil length		80mm ± 5mm (60mm length also available, contact our sales representative)	SS-62xM: 200mm ± 10mm SS-62xS*: 100mm ± 10mm	SS-29xL: 700mm ± 10mm SS-29xS: 300mm ± 10mm				
S	Coil	Coil diameter 1.7mm, max.		3mm, max.	8.5mm, max.				
	Max volt	kimum age	1.2kVpeak	5kVpeak	10kVpeak				
	Sens leng	sor cable gth	1.5m ± 50mm	3.0m ± 100mm					
	Ope tem	eration p.		-40 $^\circ C$ to 125 $^\circ C$ (Sensor cable inclu	ded)				
	Dim	ensions		Approx. $80(W) \times 165(H) \times 35(D)$	mm				
er.	Wei	ght	Approx. 0.37kg	Approx. 0.4kg	SS-29xL: Approx. 0.50kg SS-29xS: Approx. 0.48kg				
Amplifier	Dow	ver supply	Size AA type dry battery : 4pcs. or AC adaptor**						
An	FOW	ier suppry	Approx. 18hours(Alkaline battery operation) Approx. 30hours(Alkaline battery operation)						
	Acc	essories	BNC to BNC	C cable(50cmx1), Instruction manual(1), Ad Hard case(1), Alkaline battery(size A					
nent		eration p. range		0°C to 40°C, 80%RH or less (excluding se	ensor part)				
Environment	Stor rang	rage temp. ge		-10°C to 60°C, 80%RH or less					
ш	Altit	tude		≦ 2,000m at ≦ 25 °C					

\* Under development \*\* For AC adaptor, please contact our representatives in your region.

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