

NEW SS-280A-H series
NEW SS-680 series
NEW SS-660 series
 SS-280A series
 SS-620 series
 SS-290 series

World-class technology!!

with "High temperature at +150°C", "Wide frequency bandwidth at 100MHz" and "Ultra thin cable diameter at $\phi 1\text{mm}$ "

Total of 46 models

Ultra thin at $\phi 1\text{mm}$

SS-660 series

Frequency BW	30MHz
Temperature range	-40°C~+125°C
Max. Voltage	600V vs GND
Sensor coil	84mm $\pm$ 4mm
Coil diameter	1mm (max.)

120A 300A 600A

Wide BW at 100MHz

SS-680 series

Frequency BW	100MHz
Temperature range	-10°C~+70°C
Max. Voltage	1.2kV vs GND
Sensor coil	OD : 24mm ID : 14mm Thickness : 5.8mm

120A 300A 600A

SS-280A /SS-280A-H series

Series	SS-280A	SS-280A-H
Frequency BW	30MHz	
Temperature range	-40°C~+125°C	-40°C~+150°C
Max. Voltage	1.2kV vs GND	
Sensor coil	84mm $\pm$ 4mm	
Coil diameter	1.7mm (max.)	

30A 60A 120A 300A 600A 1.2kA 3.0kA
 6.0kA 12kA

SS-620 series

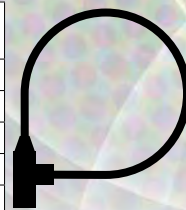
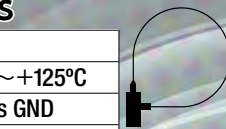
Frequency BW	20MHz (M type) 25MHz (S type)
Temperature range	-40°C~+125°C
Max. Voltage	5kV vs GND
Sensor coil	M type 200mm $\pm$ 5mm S type 100mm $\pm$ 5mm
Coil diameter	3mm (max.)

120A 300A 600A
 1.2kA 3.0kA 6.0kA 12kA

SS-290 series

Frequency BW	10MHz (L type) 20MHz (S type)
Temperature range	-40°C~+125°C
Max. Voltage	10kV vs GND
Sensor coil	L type 700mm $\pm$ 10mm S type 300mm $\pm$ 10mm
Coil diameter	8.5mm (max.)

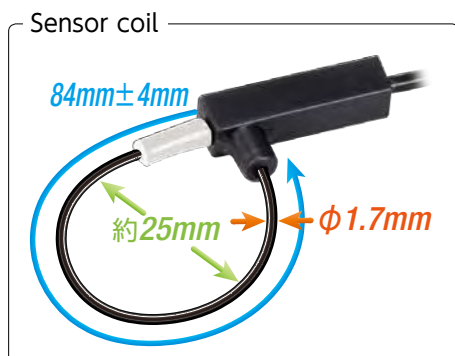
1.2kA 3.0kA 6.0kA 12kA



SS-280A-H Series NEW Japan made

+150°C high temperature

Frequency bandwidth	30MHz
Temperature range (Sensor coil & cable)	-40°C ~ +150°C
Maximum peak voltage	1.2kV vs Earth ground
Coil length	84mm
Coil diameter	1.7mm (max.)



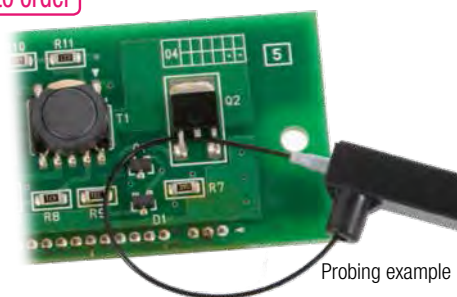
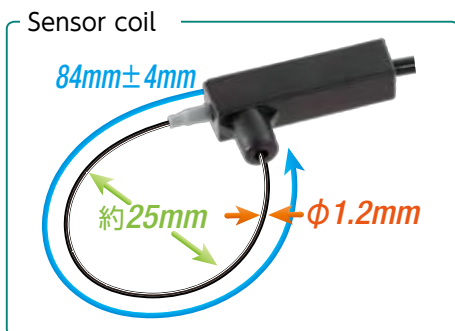
Model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute maximum di/dt	
							Peak [kA/μs]	RMS [kA/μs]
SS-281A-H	110Hz ~ 30MHz	-40°C ~ +150°C	200	30	2	3.5	80	1.0
SS-282A-H	65Hz ~ 30MHz		100	60	4	2.5		1.5
SS-283A-H	32Hz ~ 30MHz		50	120	8	2.0		
SS-284A-H	9Hz ~ 30MHz		20	300	20	1.8		
SS-285A-H	6Hz ~ 30MHz		10	600	40		50	2.0
SS-286A-H	3Hz ~ 30MHz		5	1,200	50			
SS-287A-H	2Hz ~ 30MHz		2	3,000		1.4		
SS-288A-H (made to order)	2Hz ~ 30MHz		1	6,000				
SS-289A-H (made to order)	2Hz ~ 30MHz		0.5	12,000				

Customising examples

Contact us for made-to-order specifications

● Urtla thin sensor coil high withstanding voltage (1.2kV) Made to order

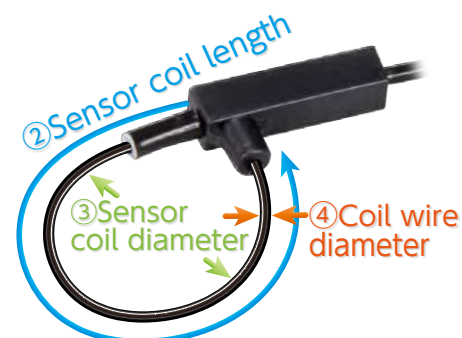
Base model	SS-660 series
Frequency bandwidth	30MHz
Temperature range (Sensor coil & cable)	-40°C ~ +125°C
Maximum peak voltage	1.2kV vs Earth ground
Coil length	84mm
Coil diameter	1.2mm (max.)



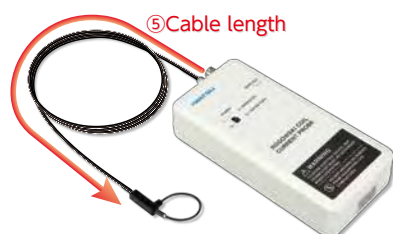
Base model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute max.di/dt	
							Peak [kA/μs]	RMS [kA/μs]
SS-663 base High voltage model	65Hz ~ 30MHz	-40°C ~ +125°C	50	120	8	3.5	80	3.0
SS-664 base High voltage model	32Hz ~ 30MHz		20	300	20	2.5		
SS-665 series High voltage model	17Hz ~ 30MHz		10	600	40	2.0		
1,200A High voltage model	9Hz ~ 30MHz		5	1,200	80	1.8		

● Full custom made

Made to order



Custom made item	Base model	Freq. BW [-3dB]	① Peak current	② Sensor coil length (③ Φ)	④ Sensor coil wire diameter	⑤ Cable length
Cable length 1.5m → 3.0m	SS-280A	f _L ~ 30MHz	30A ~ 12kA	80mm (25mm)	1.7mm	3.0m
Sensor coil length 3.0mm → 2.5mm	SS-620M	f _L ~ 20MHz	600A ~ 12kA	200mm (60mm)	2.5mm	3.0m
Peak current 120kA	SS-290L	f _L ~ 10MHz	1.2kA ~ 12kA, 120kA	700mm (220mm)	8.5mm	3.0m

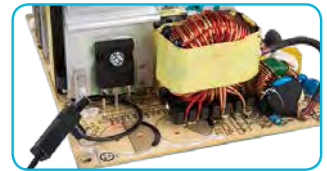


Custom made size casing for SS-280A

Item	Specification
Electrical specifications	Peak current 30A~12kA (choose one from 8 kinds)
	Sensitivity, Freq. BW, Absolute di/dt, Noise, Accuracy and linearity can be compatible to SS-28xA at same emodel
Max. voltage	1.2kV peak vs Earth ground
Dimensions	Approx. 81(W)×95(D)×26(H) mm
Power supply	DC power at 7V~12V (Battery operation not available)
	Power on/off by DC power, no indication LED for power on

SS-280A Series Japan made

Frequency bandwidth	30MHz
Temperature range (Sensor&cable)	-40°C~+125°C
Maximum peak voltage	1.2kV or Earth ground
Coil length	84mm
Coil diameter	1.7mm (max.)



Sensor coil



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

SS-680 Series Japan made

Frequency bandwidth	100MHz
Temperature range (Sensor&cable)	-10°C~+70°C
Maximum peak voltage	1.2kV vs Earth ground
Sensor coil dimensions	Outer diameter : 24mm Inner diameter : 14mm Thickness : 5.8mm



Frequency BW at 100MHz



Sensor coil



Model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Output Full Scale [V]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute max. di/dt	
SS-683	65Hz ~ 100MHz	-10°C ~ +70°C	10	120	±1.2V	30	1.8	150	3.0
SS-684	32Hz ~ 100MHz		5	300	±1.5V	85			
SS-685	15Hz ~ 100MHz		2	600	±1.2V	150			

SS-660 Series Japan made

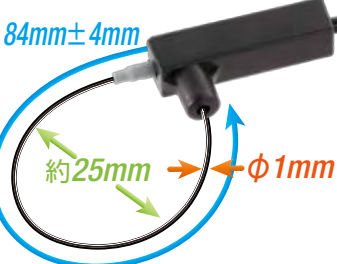
Frequency bandwidth	30MHz
Temperature range (Sensor&cable)	-40°C~+125°C
Maximum peak voltage	600V vs Earth ground
Coil length	84mm
Coil diameter	1mm (max.)



Ultra thin coil at φ1mm



Sensor coil

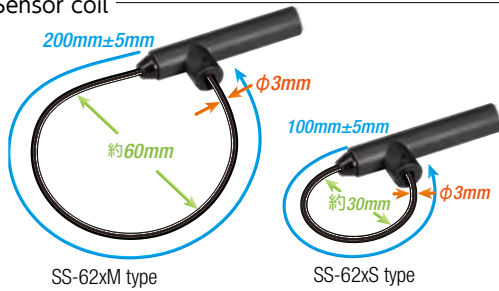


Model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute max. di/dt	
SS-663	65Hz ~ 30MHz	-40°C ~ +125°C	50	120	8	3.5	80	3.0
SS-664	32Hz ~ 30MHz		20	300	20	2.5		
SS-665	17Hz ~ 30MHz		10	600	40	2.0		

SS-620 Series Japan made

Frequency bandwidth	20MHz (SS-62xM) , 25MHz (SS-62xS)
Temperature range (Sensor coil & cable)	-40°C ~ +125°C
Maximum peak voltage	5kV vs Earth ground
Coil length	200mm (SS-62xM) , 100mm (SS-62xS)
Coil diameter	3mm (max.)

Sensor coil



Probing example

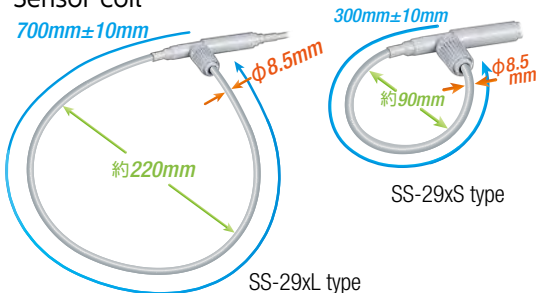


Model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute max. di/dt	
							Peak [kA/μs]	RMS [kA/μs]
SS-623M	10Hz ~ 20MHz	-40°C ~ +125°C	50	120	6	5.0	80	3.0
SS-623S	10Hz ~ 25MHz				8			
SS-624M	4Hz ~ 20MHz		20	300	16			
SS-624S	4Hz ~ 25MHz				20			
SS-625M	2Hz ~ 20MHz		10	600	32			
SS-625S	2Hz ~ 25MHz				40			
SS-626M	1Hz ~ 20MHz		5	1,200	60	3.5		
SS-626S	1Hz ~ 25MHz				80			
SS-627M	0.8Hz ~ 20MHz		2	3,000	80	2.0		
SS-627S	0.8Hz ~ 25MHz					1.4		
SS-628M	0.6Hz ~ 20MHz		1	6,000				
SS-628S	0.6Hz ~ 25MHz							
SS-629M	0.4Hz ~ 20MHz		0.5	12,000		1.2		
SS-629S	0.4Hz ~ 25MHz							

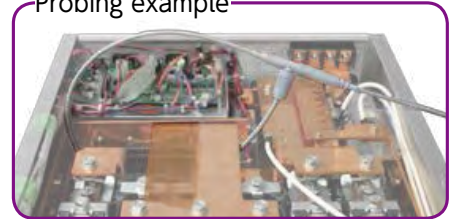
SS-290 Series Japan made

Frequency bandwidth	10MHz (SS-29xL) , 20MHz (SS-29xS)
Temperature range (Sensor coil & cable)	-40°C ~ +125°C
Maximum peak voltage	10kV vs Earth ground
Coil length	700mm (SS-29xL) , 300mm (SS-29xS)
Coil diameter	8.5mm (max.)

Sensor coil



Probing example



Model	Frequency BW [-3dB]	Temp. range (Sensor&cable)	Sensitivity [mV/A]	Peak current [A]	Peak di/dt [kA/μs]	Noise [mV rms]	Absolute max. di/dt	
							Peak [kA/μs]	RMS [kA/μs]
SS-293L	1Hz ~ 10MHz	-40℃ ~ +125℃	5	1,200	32	3.5	80	3.0
SS-293S	1Hz ~ 20MHz				60			
SS-294L	0.8Hz ~ 10MHz		2	3,000	80	2.0		
SS-294S	0.8Hz ~ 20MHz							
SS-295L	0.6Hz ~ 10MHz		1	6,000				
SS-295S	0.6Hz ~ 20MHz							
SS-296L	0.4Hz ~ 10MHz		0.5	12,000				
SS-296S	0.4Hz ~ 20MHz							

※ Contact us for 30,000A or above current detection.

Rogowski current probe common specifications

Model			SS-680 series	SS-660 series	SS-280A-H series	SS-280A series	SS-620 series	SS-290 series
Basic specification	Sensitivity accuracy		±2% (-10°C～+70°C)	±2% (-10°C～+70°C) + additional ±250ppm/°C for -10°C or lower and +70°C or higher				±2% (-10°C～+80°C) + additional ±300ppm/°C for -10°C or lower and +80°C or higher
	Out-put	Connector type	BNC					
		Voltage range	±1.5V or ±1.2V with 50Ω termination	±6V (Load at ≧ 100kΩ) ※ ±2V at 50Ω termination, Sensitivity can be half.				
	Linearity		±0.05% (for full scale)					
	ZERO adj. range		± 3mV or more	±300mV or more				
Sensor coil	Coil length/ Outer dimensions		OD : 24mm iD : 14mm Thickness : 5.8mm	Approx. 84mm ± 4mm	Approx. 84mm ± 4mm	Approx. 84mm ± 4mm (※60mm also available, contact us for quote)	SS-62xS: 100mm±5mm SS-62xM: 200mm±5mm	SS-29xS:300mm±10mm SS-29xL :700mm±10mm
	Sensor coil wire diameter		—	1.0mm, max.	1.7mm, max.		3mm, max.	8.5mm, max.
	Max. voltage		1.2kVpeak	600Vpeak	1.2kVpeak		5kVpeak	10kVpeak
	Sensor coil cable length		1.5m ±50mm				3.0m ±100mm	
	Temperature range (Sensor & cable)		-10°C～ 70°C	-40°C～ 125°C	-40°C～ 150°C	-40°C～ 125°C		
Amplifier mainframe	Dimensions		Approx. 80(W)×165(D)×35(H) mm (excluding externals)					
	Weight		Approx. 0.37kg				Approx. 0.4kg	SS-29xS : Approx. 0.48kg SS-29xL : Approx. 0.50kg
	Power supply		AA type *4pcs. (approx. 18hours with Alkaline batteries), AC adaptor is also available(optional)					AA type *4pcs. (approx. 30hours with Alkaline batteries)
	Accessories		BNC-BNC coaxial cable (50cm*1pc.), Instruction manual (1), Adjustment driver (1), Hardcase (1), Alkaline batteries*4pcs.					
Enviromental specification	Temp. range (operation)		0°C ～ +40°C, 80%RH or less					
	Temp. range (storage)		－10°C～+60°C, 80%RH or less					
	Operational altitude		≦2,000m at ≦25 °C					

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