

# Fixed Attenuators

## Product description

HUBER+SUHNER Attenuators are used in a wide variety of RF and microwave applications and excellently meet the requirements of:

- Design and Engineering
- Test and Measurement
- Build-in items for systems

Fixed attenuators are mainly used to reduce the power level of RF signals by a certain amount. The output signal is reduced with respect to the input.



## Features and benefits

- Broadband operationability
- Wide choice of attenuation values
- Low and medium power types
- All connectors meet the relevant IEC / MIL / CECC interface standards
- High repeatability
- Custom designs available on request

## Standard attenuators, series 66/68, low power, 50 Ω and 75 Ω

Connector series	Frequency range DC to (GHz)	nom. attenuation (dB)	VSWR max.	Power rating (W)	HUBER+SUHNER type	Article number
SMA (m/f)	3.0	1	1.10	2	6601.19.AC	22645086
SMA (m/f)	3.0	2	1.10	2	6602.19.AC	22645087
SMA (m/f)	3.0	3	1.10	2	6603.19.AC	22645088
SMA (m/f)	3.0	4	1.10	2	6604.19.AC	22645089
SMA (m/f)	3.0	5	1.10	2	6605.19.AC	22645090
SMA (m/f)	3.0	6	1.10	2	6606.19.AC	22645091
SMA (m/f)	3.0	7	1.10	2	6607.19.AC	22645092
SMA (m/f)	3.0	8	1.10	2	6608.19.AC	22645093
SMA (m/f)	3.0	9	1.10	2	6609.19.AC	22645094
SMA (m/f)	3.0	10	1.10	2	6610.19.AC	22645095
SMA (m/f)	3.0	15	1.10	2	6615.19.AC	23040465
SMA (m/f)	3.0	20	1.10	2	6620.19.AC	22645096
SMA (m/f)	3.0	30	1.10	2	6630.19.AC	22645097
SMA (m/f)	12.4	1	1.26	2	6601.19.AB	22643968
SMA (m/f)	12.4	2	1.26	2	6602.19.AB	22643970
SMA (m/f)	12.4	3	1.26	2	6603.19.AB	22643201
SMA (m/f)	12.4	4	1.26	2	6604.19.AB	22643972
SMA (m/f)	12.4	5	1.26	2	6605.19.AB	22643974
SMA (m/f)	12.4	6	1.26	2	6606.19.AB	22643203
SMA (m/f)	12.4	7	1.26	2	6607.19.AB	22643976



Detailed specification sheets for each item are available on request.

## Standard attenuators, series 66/86, low power, 50 Ω and 75 Ω




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Connector series	Frequency range DC to (GHz)	nom. attenuation (dB)	VSWR max.	Power rating (W)	HUBER+SUHNER type	Article number	
SMA (m/f)	12.4	8	1.26	2	6608.19.AB	22643978	
SMA (m/f)	12.4	9	1.26	2	6609.19.AB	22643980	
SMA (m/f)	12.4	10	1.26	2	6610.19.AB	22643205	
SMA (m/f)	12.4	15	1.26	2	6615.19.AB	23040463	
SMA (m/f)	12.4	20	1.26	2	6620.19.AB	22643207	
SMA (m/f)	12.4	30	1.26	2	6630.19.AB	22643209	
BNC (m/f)	4.0	1	1.20	2	6801.01.A	22641542	
BNC (m/f)	4.0	2	1.20	2	6802.01.A	22641543	
BNC (m/f)	4.0	3	1.20	2	6803.01.A	22550177	
BNC (m/f)	4.0	4	1.20	2	6804.01.A	22641544	
BNC (m/f)	4.0	6	1.20	2	6806.01.A	22550178	
BNC (m/f)	4.0	7	1.20	2	6807.01.A	22641546	
BNC (m/f)	4.0	10	1.20	1	6810.01.A	22550179	
BNC (m/f)	4.0	20	1.20	1	6820.01.A	22550180	
BNC (m/f)	4.0	30	1.20	1	6830.01.A	22550181	
TNC (m/f)	4.0	5	1.20	2	6805.26.AC	23011475	
TNC (m/f)	4.0	6	1.20	2	6806.26.AC	23004296	
TNC (m/f)	4.0	9	1.20	2	6809.26.AC	23011476	
TNC (m/f)	12.4	3	1.40	2	6803.26.A	22543746	
TNC (m/f)	12.4	6	1.40	2	6806.26.A	22550194	
TNC (m/f)	12.4	10	1.40	1	6810.26.A	22550195	
TNC (m/f)	12.4	20	1.40	1	6820.26.A	22550196	
TNC (m/f)	12.4	30	1.40	1	6830.26.A	22550197	
N (m/f)	4.0	1	1.10	2	6801.17.AC	23000123	
N (m/f)	4.0	2	1.10	2	6802.17.AC	23000122	
N (m/f)	4.0	3	1.10	2	6803.17.AC	23000121	
N (m/f)	4.0	4	1.10	2	6804.17.AC	23002153	
N (m/f)	4.0	5	1.10	2	6805.17.AC	23002154	
N (m/f)	4.0	6	1.10	2	6806.17.AC	23000120	
N (m/f)	4.0	7	1.10	2	6807.17.AC	23002155	
N (m/f)	4.0	8	1.10	2	6808.17.AC	23002156	
N (m/f)	4.0	9	1.10	2	6809.17.AC	23002157	
N (m/f)	4.0	10	1.10	2	6810.17.AC	23000119	
N (m/f)	4.0	20	1.10	2	6820.17.AC	23000908	
N (m/f)	4.0	30	1.10	1	6830.17.AC	23003966	
N (m/f)	12.4	1	1.25	2	6801.17.A	22641535	
N (m/f)	12.4	2	1.25	2	6802.17.A	22641536	
N (m/f)	12.4	3	1.25	2	6803.17.A	22550182	
N (m/f)	12.4	4	1.25	2	6804.17.A	22641537	
N (m/f)	12.4	5	1.25	2	6805.17.A	22641538	
N (m/f)	12.4	6	1.25	2	6806.17.A	22550183	
N (m/f)	12.4	7	1.25	2	6807.17.A	22641539	
N (m/f)	12.4	8	1.25	2	6808.17.A	22641540	
N (m/f)	12.4	9	1.25	2	6809.17.A	22641541	
N (m/f)	12.4	10	1.25	1	6810.17.A	22550185	
N (m/f)	12.4	20	1.25	1	6820.17.A	22550186	
N (m/f)	12.4	30	1.25	1	6830.17.A	22550187	

Detailed specification sheets for each item are available on request.




## Standard attenuators, series 69, low power, 50 Ω and 75 Ω

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Connector series	Frequency range DC to (GHz)	Nom. attenuation (dB)	VSWR max.	Power rating (W)	HUBER+SUHNER type	Article number	
BNC (m/f)	1.0	3	1.10	1.0	6903.01.A	22550053	
BNC (m/f)	1.0	6	1.10	1.0	6906.01.A	22550067	
BNC (m/f)	1.0	10	1.10	0.5	6910.01.A	22550068	
<b>75 Ω types</b>							
N 75Ω (m/f)	1.0	3	1.15	1.0	6903.18.A	22550218	
N 75Ω (m/f)	1.0	6	1.15	1.0	6906.18.A	22550219	
N 75Ω (m/f)	1.0	10	1.15	0.8	6910.18.A	22550220	
N 75Ω (m/f)	1.0	20	1.15	0.5	6920.18.A	22550221	
N 75Ω (m/f)	0.7	30	1.20	0.5	6930.18.A	22550222	
BNC 75Ω (m/f)	1.0	3	1.15	1.0	6903.02.A	22550074	
BNC 75Ω (m/f)	1.0	6	1.15	1.0	6906.02.A	22550088	
BNC 75Ω (m/f)	1.0	10	1.15	0.5	6910.02.A	22550124	
BNC 75Ω (m/f)	1.0	20	1.20	0.5	6920.02.A	22550138	
BNC 75Ω (m/f)	0.7	30	1.20	0.5	6930.02.A	22550159	

## Standard attenuators, series 59, medium power, 50 Ω

10 Watt

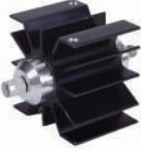
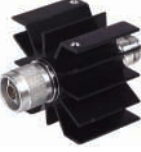
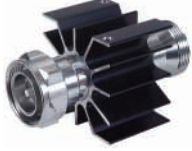
Connector series	Frequency range DC to (GHz)	Nom. attenuation (dB)	VSWR max.	Power rating (W) <sup>z</sup>	HUBER+SUHNER type	Article number	
SMA (m/f)	6	3	1.25	10	5903.19.0001	22659280	
SMA (m/f)	6	6	1.35	10	5906.19.0002	22651220	
SMA (m/f)	3	10	1.25	10	5910.19.0001	22651214	
N (m/f)	6	3	1.25	10	5903.17.0003	22648036	
N (m/f)	6	6	1.35	10	5906.17.0003	22648039	
N (m/f)	3	10	1.25	10	5910.17.0005	22649255	
7/16 (m/f)	6	3	1.25	10	5903.41.0001	22652689	
7/16 (m/f)	6	6	1.35	10	5906.41.0001	22652690	
7/16 (m/f)	3	10	1.25	10	5910.41.0001	22652691	

<sup>z</sup> = convection cooled

Detailed specification sheets for each item are available on request.

## Standard attenuators, series 59, medium power, 50 Ω




25 Watt

Connector series	Frequency range DC to (GHz)	Nom. attenuation (dB)	VSWR max.	Power rating (W) <sup>z</sup>	HUBER+SUHNER type	Article number	
SMA (m/f)	6	3	1.25	25	5903.19.0002	22659518	
SMA (m/f)	6	6	1.35	25	5906.19.0003	22659520	
SMA (m/f)	3	10	1.25	25	5910.19.0002	22659429	
N (m/f)	6	3	1.25	25	5903.17.0004	22648037	
N (m/f)	6	6	1.35	25	5906.17.0004	22648040	
N (m/f)	3	10	1.25	25	5910.17.0006	22651229	
7/16 (m/f)	6	3	1.25	25	5903.41.0002	22651234	
7/16 (m/f)	6	6	1.35	25	5906.41.0002	22651235	
7/16 (m/f)	3	10	1.25	25	5910.41.0002	22651236	

<sup>z</sup> = convection cooled

## Standard attenuators, series 59, medium power, 50 Ω

50 Watt

Connector series	Frequency range DC to (GHz)	Nom. attenuation (dB)	VSWR max.	Power rating (W) <sup>z</sup>	HUBER+SUHNER type	Article number	
SMA (m/f)	6	3	1.25	50	5903.19.0003	22659519	
SMA (m/f)	6	6	1.35	50	5906.19.0004	22659521	
SMA (m/f)	3	10	1.25	50	5910.19.0003	22659522	
N (m/f)	6	3	1.25	50	5903.17.0005	22648038	
N (m/f)	6	6	1.35	50	5906.17.0005	22648041	
N (m/f)	3	10	1.25	50	5910.17.0004	22649254	
7/16 (m/f)	6	3	1.25	50	5903.41.0003	22651243	
7/16 (m/f)	6	6	1.35	50	5906.41.0003	22650373	
7/16 (m/f)	3	10	1.25	50	5910.41.0003	22650408	

<sup>z</sup> = convection cooled

Detailed specification sheets for each item are available on request.

## Precision attenuators, series 66/68, low power, 50 Ω

Connector series	Frequency range DC to (GHz)	nom. attenuation (dB)	VSWR max.	Power rating (W)	HUBER+SUHNER type	Article number		
SMA (m/f)	18	1	1.35	2	6801.19.A	22641550		
SMA (m/f)	18	2	1.35	2	6802.19.A	22641555		
SMA (m/f)	18	3	1.35	2	6803.19.A	22550028		
SMA (m/f)	18	4	1.35	1	6804.19.A	22641554		
SMA (m/f)	18	5	1.35	1	6805.19.A	22641553		
SMA (m/f)	18	6	1.35	1	6806.19.A	22550030		
SMA (m/f)	18	7	1.35	1	6807.19.A	22641552		
SMA (m/f)	18	8	1.35	1	6808.19.A	22641551		
SMA (m/f)	18	9	1.35	1	6809.19.A	22641566		
SMA (m/f)	18	10	1.35	1	6810.19.A	22550031		
SMA (m/f)	18	20	1.35	1	6820.19.A	22550042		
SMA (m/f)	18	30	1.35	1	6830.19.A	22550052		
SMA (m/f)	18	1	1.35	2	6601.19.AA	22643967		
SMA (m/f)	18	2	1.35	2	6602.19.AA	22643969		
SMA (m/f)	18	3	1.35	2	6603.19.AA	22643200		
SMA (m/f)	18	4	1.35	2	6604.19.AA	22643971		
SMA (m/f)	18	5	1.35	2	6605.19.AA	22643973		
SMA (m/f)	18	6	1.35	2	6606.19.AA	22643202		
SMA (m/f)	18	7	1.35	2	6607.19.AA	22643975		
SMA (m/f)	18	8	1.35	2	6608.19.AA	23003623		
SMA (m/f)	18	9	1.35	2	6609.19.AA	22643979		
SMA (m/f)	18	10	1.35	2	6610.19.AA	22643204		
SMA (m/f)	18	15	1.35	2	6615.19.AA	23040166		
SMA (m/f)	18	20	1.35	2	6620.19.AA	22643206		
SMA (m/f)	18	30	1.35	2	6630.19.AA	22643208		
N (m/f)	18	3	1.25	2	6803.17.B	22550188		
N (m/f)	18	6	1.25	2	6806.17.B	22550189		
N (m/f)	18	10	1.25	1	6810.17.B	22550190		
N (m/f)	18	20	1.25	1	6820.17.B	22550191		
N (m/f)	18	30	1.25	1	6830.17.B	22550192		
PC7	18	3	1.20	2	6803.28.A	22550198		
PC7	18	6	1.20	2	6806.28.A	22550199		
PC7	18	10	1.20	1	6810.28.A	22550023		
PC7	18	20	1.20	1	6820.28.A	22550025		
PC7	18	30	1.20	1	6830.28.A	22550027		

Detailed specification sheets for each item are available on request.