

COAXIAL STEP ATTENUATOR

Features:

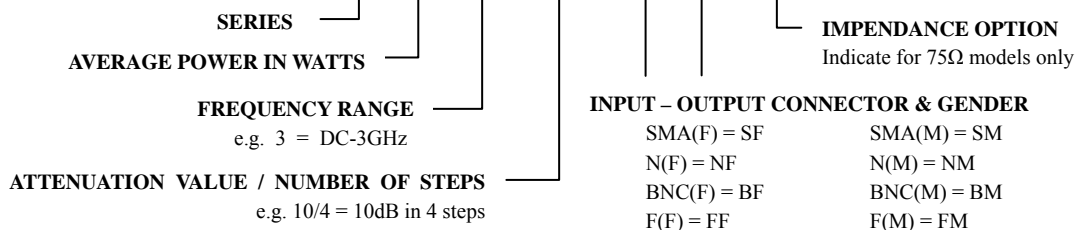


Attenuation Type:	Coaxial Fixed
Attenuation Range:	10, 20, 30, 40, 60, 70, 90dB
Attenuation Steps:	1dB or 0.1dB per Steps
No. of Steps:	4, 5, 6, 8 Steps
Average Power:	2, 5, 10W (50Ω) 2, 5W (75Ω)
Frequency Range:	DC – 3GHz
Characteristic Impedance:	50Ω (N, SMA, BNC) 75Ω (N, BNC, F)
Connectors:	SMA, N, BNC, F
Temperature Range:	- 20°C to + 85°C

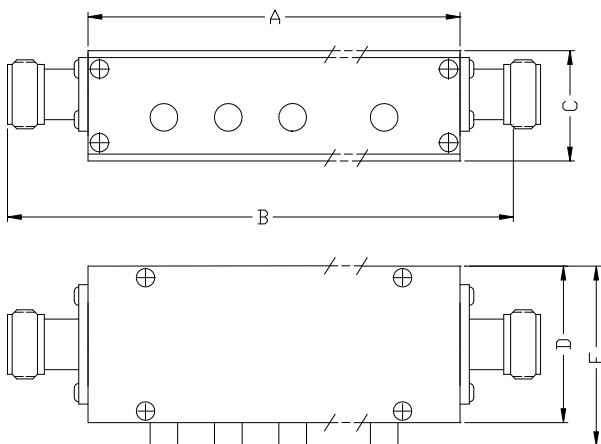
The ESA series is a family of push button coaxial step attenuations. The attenuators can handle average power in the range 2W to 10W operating from DC – 3GHz with low VSWR, in 4 to 8 steps to achieve 10dB to 90dB attenuations. Choices available for different connectors and characteristic impedance.

Part Number Modeling System:

ESA 10 – 3 – 10/4 – SF SM – 75



Outline:



OUTLINE	A	B	C	D	E	Weight
4 Steps	2.95 [75.3]	4.39 [111.5]	0.95 [24.0]	1.35 [34.3]	1.57 [40.0]	160g
5 Steps	3.52 [89.3]	4.94 [125.5]	0.95 [24.0]	1.35 [34.3]	1.57 [40.0]	185g
6 Steps	4.07 [103.3]	5.49 [139.5]	0.95 [24.0]	1.35 [34.3]	1.57 [40.0]	215g
8 Steps A	5.17 [131.3]	6.59 [167.5]	0.95 [24.0]	1.35 [34.3]	1.57 [40.0]	250g
8 Steps B	4.96 [126.0]	6.42 [163.0]	0.79 [20.0]	1.18 [30.0]	1.38 [35.0]	180g

Dimension in inches [mm]
Outline dimensions based on N type connector models.

Specifications:

Series	Frequency (GHz)	Attenuation Value / Step (dB)	Attenuation Steps (dB)	Attenuation Accuracy (dB) [max]	VSWR [max]	Insertion Loss (dB) [max]
ESAx-1-10/4	DC-1.0	10dB / 1dB per step	4 Steps 1, 2, 3, 5	± 0.50	1.40	1.0
ESAx-2.5-10/4	DC-2.5			± 1.00	1.40	1.8
ESAx-3-10/4	DC-3.0			± 1.50	1.50	2.5
ESAx-1-10/8	DC-1.0	10dB / 0.1dB per step	8 Steps 0.1, 0.2, 0.3, 0.5, 1, 2, 3, 5 Outline: 8 Steps A	± 0.50	1.40	1.5
ESAx-1-20/5	DC-1.0	20dB / 1dB per step	5 Steps 1, 2, 4, 8, 10	± 0.80	1.40	1.2
ESAx-2.5-20/5	DC-2.5			± 1.50	1.40	2.5
ESAx-3-20/5	DC-3.0			± 2.00	1.50	3.0
ESAx-1-30/5	DC-1.0	30dB / 1dB per step	5 Steps 1, 2, 4, 8, 16	± 0.80	1.40	1.2
ESAx-2.5-30/5	DC-2.5			± 1.50	1.40	2.5
ESAx-3-30/5	DC-3.0			± 2.00	1.50	3.0
ESAx-1-40/6	DC-1.0	40dB / 1dB per step	6 Steps 1, 2, 4, 8, 10, 16	± 1.00	1.40	1.5
ESAx-2.5-40/6	DC-2.5			± 2.00	1.40	2.5
ESAx-3-40/6	DC-3.0			± 2.50	1.50	3.0
ESAx-1-60/8	DC-1.0	60dB / 1dB per step	8 Steps 1, 2, 4, 8, 10, 10, 10, 16 Outline: 8 Steps A	± 1.00	1.40	1.5
ESAx-2.5-60/8	DC-2.5			± 2.50	1.40	3.0
ESAx-1-70/8	DC-1.0	70dB / 1dB per step	8 Steps 1, 2, 4, 8, 10, 10, 16, 20 Outline: 8 Steps B	± 1.75	1.40	2.0
ESAx-2.5-70/8	DC-2.5			± 2.50	1.40	3.0
ESAx-1-90/8	DC-1.0	90dB / 1dB per step	8 Steps 1, 2, 4, 8, 16, 20, 20, 20 Outline: 8 Steps B	± 2.25	1.40	2.0
ESAx-2.5-90/8	DC-2.5			± 2.70	1.40	3.0

Note: xx = average power in watts, options include 2W, 5W, 10W for 50Ω and 2W, 5W for 75Ω.