

NFA4002

DC~40GHz, 2W

Features:
 * Low VSWR
 * High Attenuation Flatness

Applications:
 * Wireless
 * Transmitter
 * Laboratory Test
 * Radar

Electrical

Frequency: DC~40GHz
 Attenuation: 0~15, 20, 25, 30, 40, 50dB
 Impedance: 50Ω
 Average Power*1: 2W@25°C max.

[1] Derated linearly to 0.5W@125°C.

Mechanical

RF Connectors: 2.92mm, SMP, SSMP, SSMA
 Outer Conductor: Passivated stainless steel/
 Gold plated brass/Gold plated beryllium copper
 Dielectric: PEI/PTFE
 Inner Conductor: Gold plated brass/Gold plated beryllium copper

Environmental

Temperature: -55~+125°C

Length (mm/in)

Attenuation (dB)	2.92mm
0	21.9 [.862]
1~30	17.2 [.677]
40	47.6 [1.874]
50	49 [1.929]

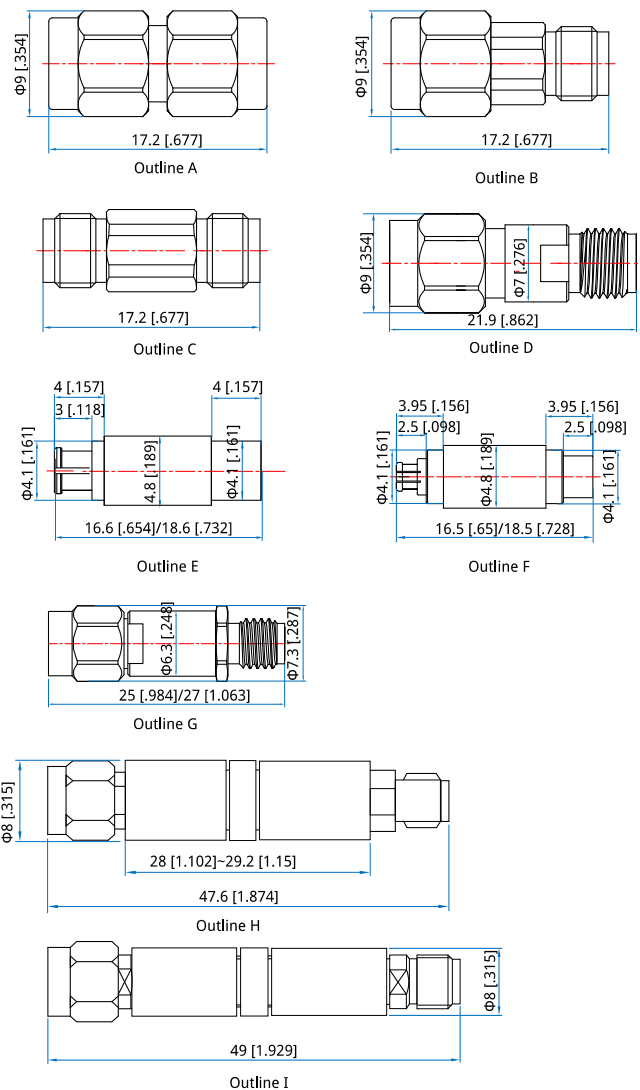
Length (mm/in)

Attenuation (dB)	SMP	SSMP	SSMA
0~10, 12, 15, 20	16.6 [.654]	16.5 [.65]	25 [.984]
30	18.6 [.732]	18.5 [.728]	27 [1.063]

Peak Power

Peak Power (W)	Pulse Width (μs)	Duty Cycle (%)	Applicable Scope
20	5	1	2.92mm(1~30dB), SMP, SSMP, SSMA
200		1	2.92mm(40, 50dB)

Outline Drawings



Unit: mm [in]
 Tolerance: $\pm 0.2\text{mm}$ [$\pm 0.008\text{in}$]

Attenuation Accuracy and VSWR(2.92mm)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)							VSWR (max.)
	0	1-3	4-15	20/25	30	40	50	
DC~40	-0.2/+0.8	\pm 0.6	\pm 0.7	\pm 0.8	\pm 1	-1.0/+2.0	-1.0/+2.0	1.25, 1.35@0dB, 1.4@40, 50dB

Attenuation Accuracy and VSWR(SMP/SSMP/SSMA)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)							VSWR (max.)
	0	1~6	7~10	12	15	20	30	
DC~40	-0.2/+0.8	-0.4/+1.0	-0.6/+1.0	-0.6/+1.0	-0.6/+1.0	-0.6/+1.0	-1.2/+1.2	1.45

How To Order

NFA4002-X-Y-Z

- X: Frequency in GHz
- Y: Attenuation in dB
- Z: Connector type

Examples:

To order an attenuator, DC~40GHz, 2.92mm male to 2.92mm female, 3dB attenuation, specify NFA4002-40-3-K.

Connector naming rules:

- K - 2.92mm
- KK - Outline A
- K - (Outline B -1 ~ 30dB, Outline D - 0dB, Outline H - 40dB, Outline I - 50dB)
- KFKF - Outline C
- P - SMP (Outline E)
- G - SSMP (Outline F)
- A - SSMA (Outline G)