

## RF CHIP ATTENUATOR

### RFA001 010



#### Features and Applications

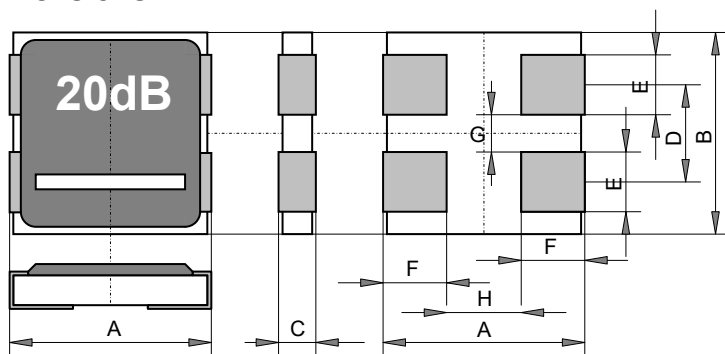
2.5GHz-1W surface mount small 4mmx4mm size, attenuators of 50ohm characteristic impedance.

RFA001 has 2.5GHz-1W power rating and high durability against pulse / EMI accidents in small signal applications.

Long life and temperature stability of thin film technology realize better performance at a temperature range from  $-55^{\circ}\text{C}$  to  $+155^{\circ}\text{C}$ .

Applications include impedance matching, gain control circuits, isolation circuits of power boost amplifiers at GHz, loss compensation of transmission line of data communication systems, detecting signal control of ATE-LSI test system-circuit board functional test systems, industrial measurement electronics, medical scientific electronics and miscellaneous communication systems.

#### Dimensions



	mm	inch
A	4.0 /-0.2	0.157+/-0.008
B	4.0+/-0.2	0.157+/-0.008
C	(0.65)	(0.026)
D	2.0+/-0.1	0.079+/-0.004
E	(1.2)	(0.047)
F	1.2+/-0.1	0.047+/-0.004
G	0.8+/-0.1	0.032+/-0.004
H	1.6+/-0.1	0.063+/-0.004

#### 性能仕様 Specifications and Performances

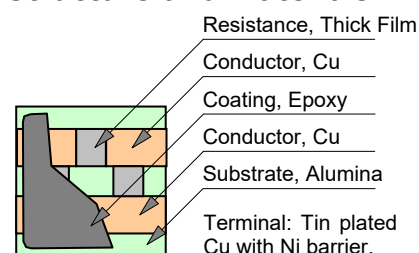
Attenuation	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 40* dB
Tolerance of Attenuation (at DC)	1-9dB:±0.3dB, 10dB:±0.5dB, 20dB:±1dB
Frequency Range	0-10dB: DC- 2,5GHz, 20dB: DC-600MHz
Volt Standing Wave Ratio	<1.2(0-10dB, DC-2.5GHz) , (20dB, 0.6GHz)
Rating Power	1W
Characteristic Impedance	50 ohm
Tolerance of Impedance (at DC)	±2 ohm

\* 40dB attenuation is optional, please contact to [info@nikkohm.co.jp](mailto:info@nikkohm.co.jp)

#### Ordering Information

MODEL	ATTENUATION	PACKAGE	NOTE
RFA001010	6DB	Z00	
RFA001010	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20DB	Z00	BULK
		Z01	T & R

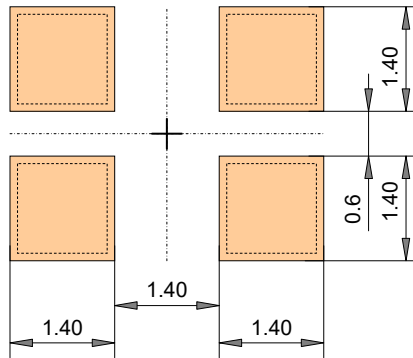
#### Structure and Materials



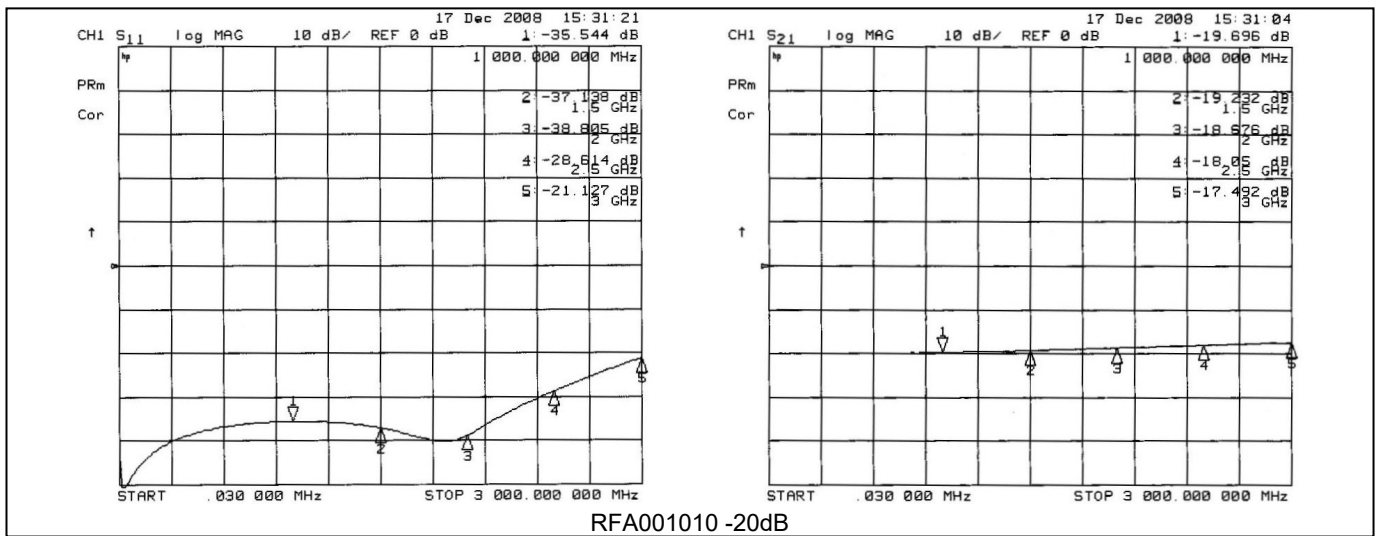
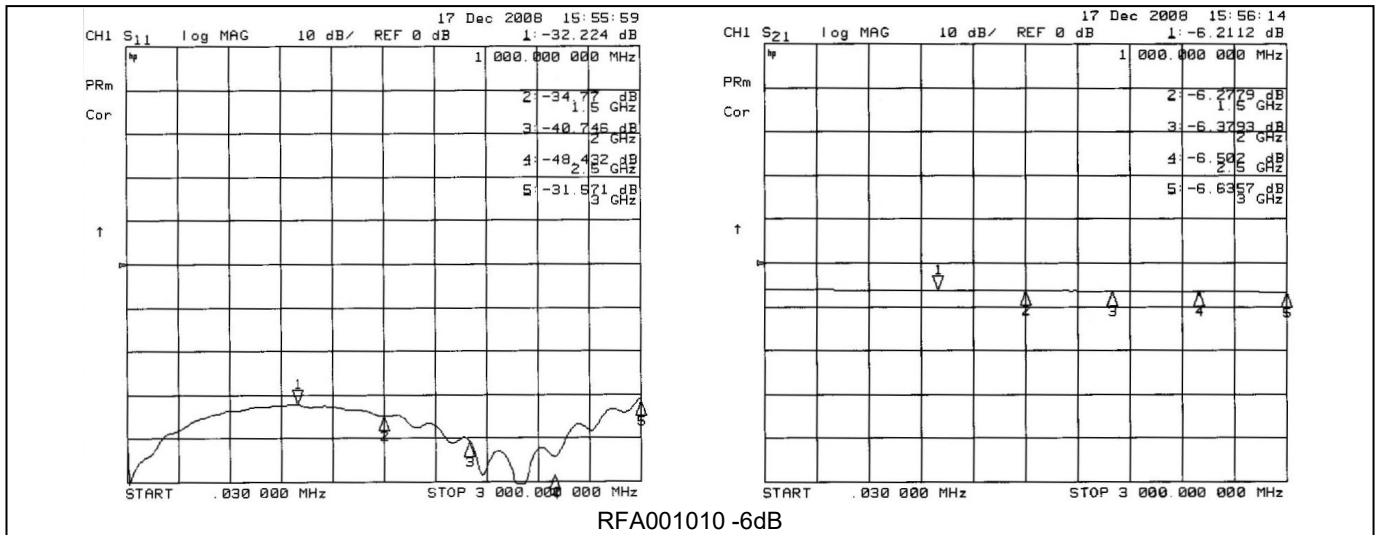
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Foot Pattern



Typical S11-S21



換算式、Transformation:  $VSWR = \frac{1+|\Gamma|}{1-|\Gamma|}$  .....  $|\Gamma| = 10^{\frac{S11}{20}}$   $|\Gamma| = \frac{VSWR-1}{VSWR+1}$  .....  $S11 = -(-20 \log |\Gamma|)$