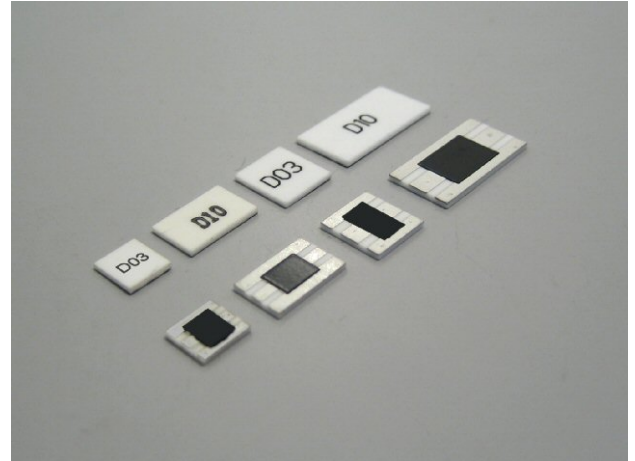


COAXIAL  
RF POWER ATTENUATORS  
RFA-54, RFA-55  
RFA-85, RFA-67, RFA-37



### Features and Applications

RFA-54D, RFA-84D, RFA-67D, RFA-37D are used for balanced coaxial attenuators, and are durable with large rated power.

In RFA-55DD, face down configuration on co-planer line show better return loss characteristics.

RFA-68D, 1.5GHz-30W, by attached to the heat sink direct, small size power attenuator.

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 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.

### Specifications and Performances

P/N	Type	Impedance	Attenuation (*1)	Frequency(*2)	Input Power(*3)
RFA-54DD	Coaxial	50 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 4GHz	0.25W
RFA-55DD	SMD	50 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 4GHz	0.25W
RFA-85DD	Coaxial	50 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	0.50W
RFA-67DD	Coaxial	50 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	1.00W
RFA-37DD	Coaxial	50 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	1.00W
RFA-54DC	Coaxial	75 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 4GHz	0.25W
RFA-55DC	SMD	75 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 4GHz	0.25W
RFA-85DC	Coaxial	75 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	0.50W
RFA-67DC	Coaxial	75 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	1.00W
RFA-37DC	Coaxial	75 ohm	2, 3, 4, 5, 6, 7, 8, 9, 10, 20 dB	DC- 3GHz	1.00W

(\*1) Attenuation tolerance at DC are 2,3,4,5,6db:  $\pm 0.2\text{dB}$ , 7,8,9,10dB:  $\pm 0.3\text{dB}$ , 20dB:  $\pm 0.4\text{dB}$

(\*2) Frequency range are typical at  $S_{11} < 20\text{dB}$ , please note it will be influenced by the structure.

(\*3) Input power are typical values under condition of assembling into metal housing.

# COAXIAL RF POWER ATTENUATORS

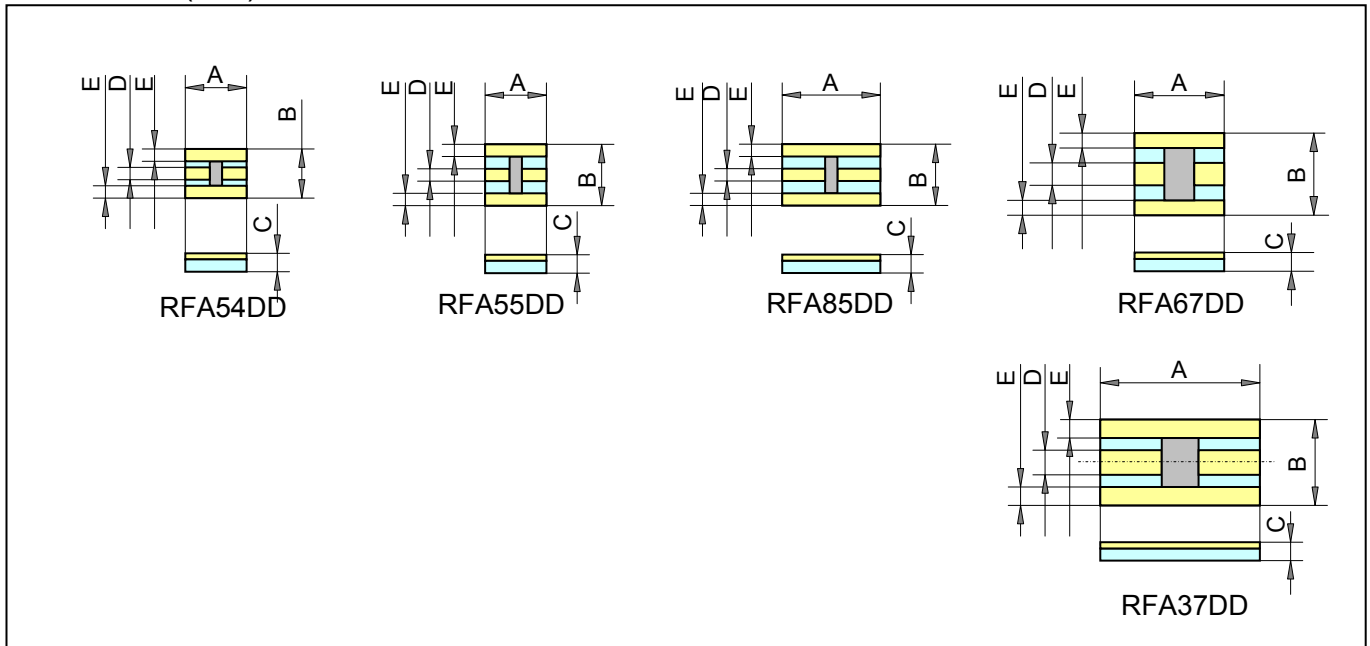
## RFA-54, RFA-55, RFA-85, RFA-67, RFA-37

### Ordering Information

Type	Configuration (*1)	Attenuation	Packaging	Note
RFA-67	DD	10dB	Z00	
RFA-54	DD(50ohm)	2dB	Z00	Bulk in PE box (Taping option)
RFA-55	DC(75ohm)	3dB	(Z01)	
RFA-85		4dB		
RFA-67		5dB		
RFA-37		6dB		
		7dB		
		8dB		
		9dB		
		10dB		
		20dB		
		16dB option		

(\*1) DD shows balanced 50ohm and DC shows balanced 75ohm characteristic impedance.

### Dimensions (mm)



Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
RFA-54D	5.00	3.80	0.70	1.20	0.80
RFA-55D	5.00	4.50	0.70	1.20	1.00
RFA-85D	8.00	5.25	0.70	1.40	1.10
RFA-67D	6.00	7.00	0.70	2.00	1.40
RFA-37D	13.00	7.00	0.70	2.00	1.40

(\*1) In case of 'DC', conductor width happen to change.

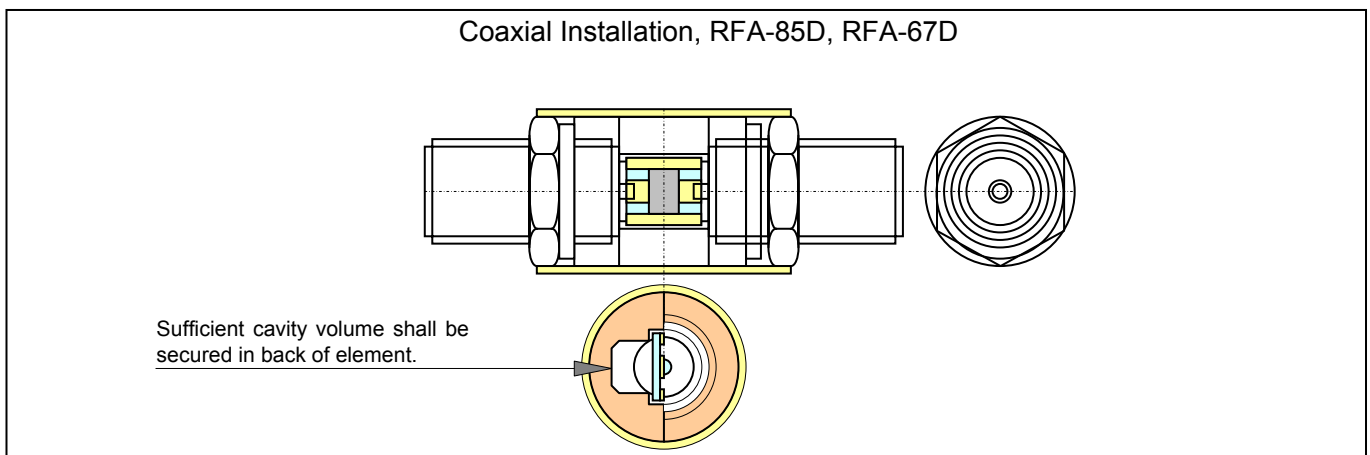
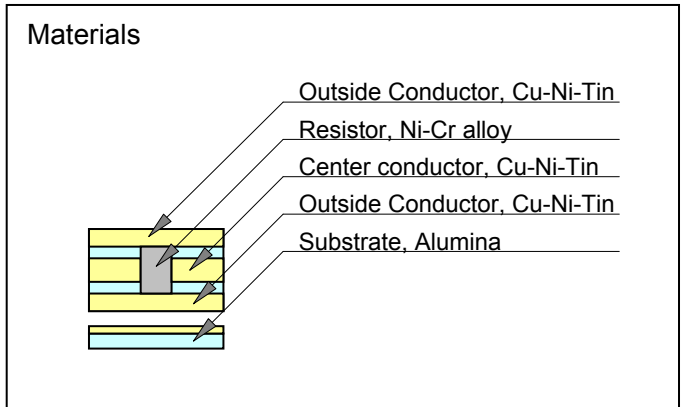
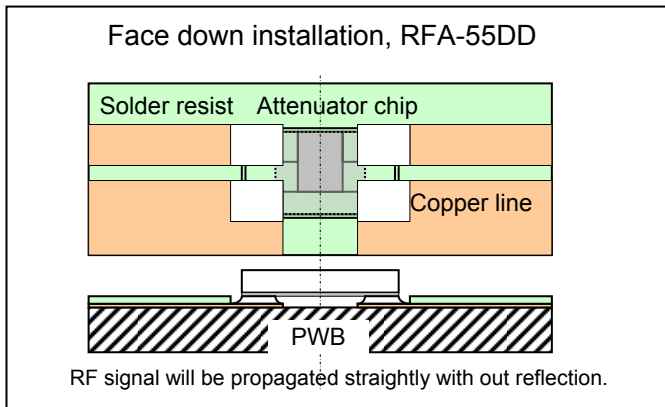
# COAXIAL RF POWER ATTENUATORS

## RFA-54, RFA-55, RFA-85, RFA-67, RFA-37

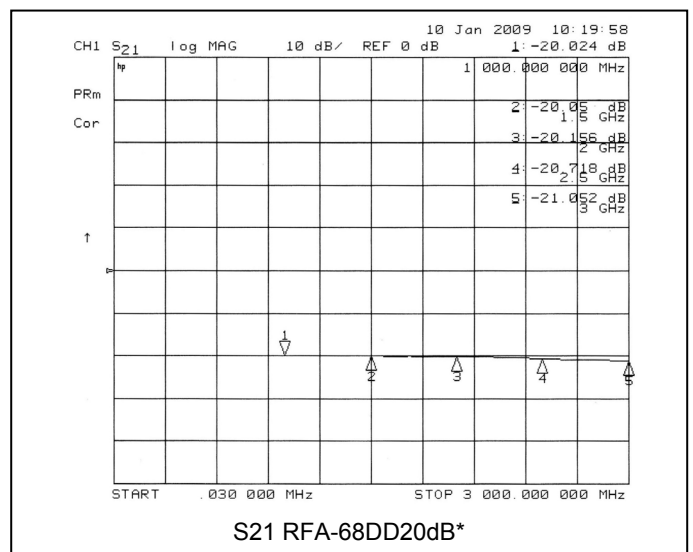
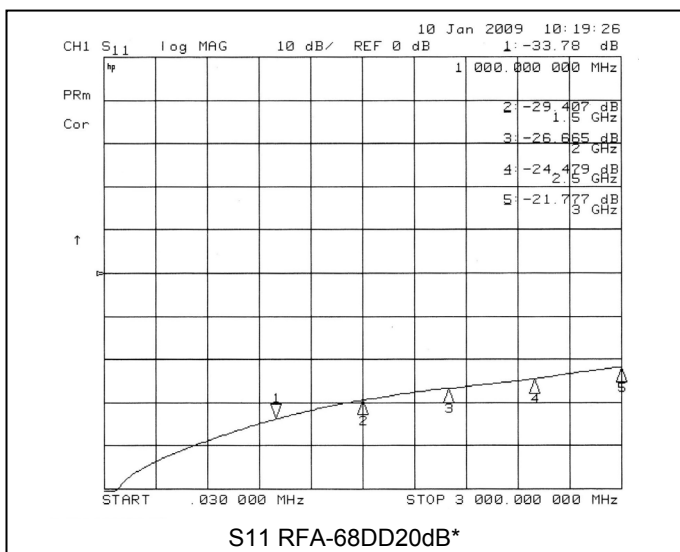
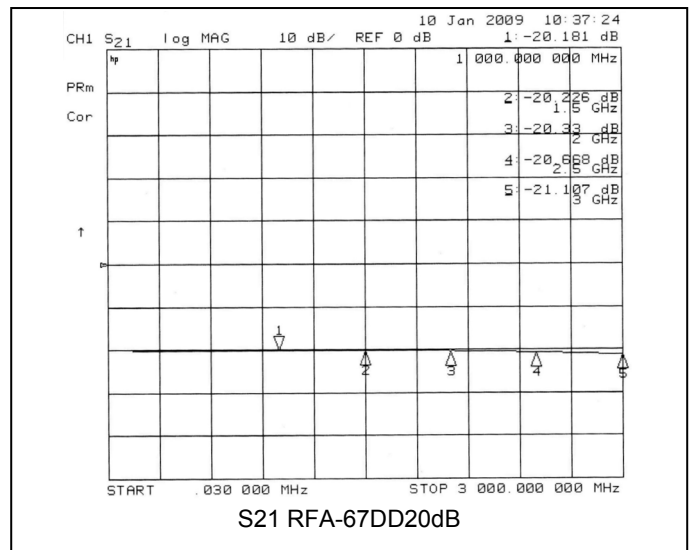
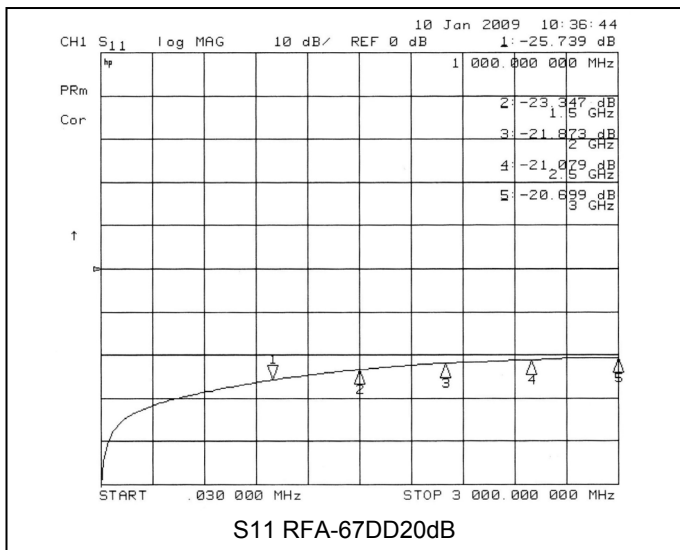
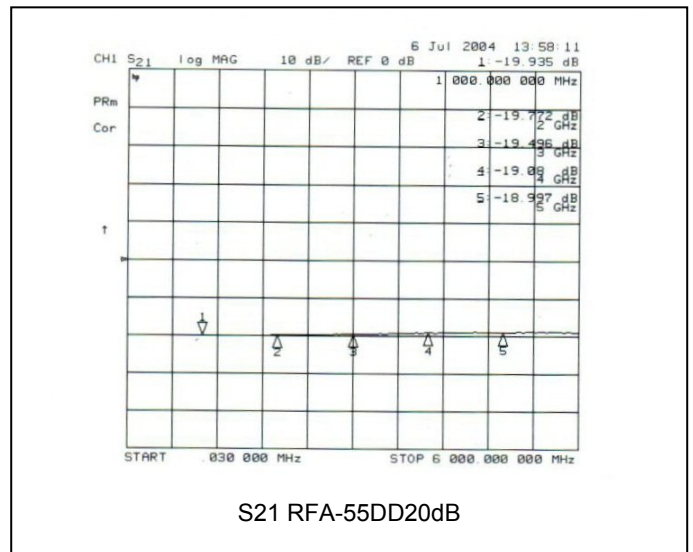
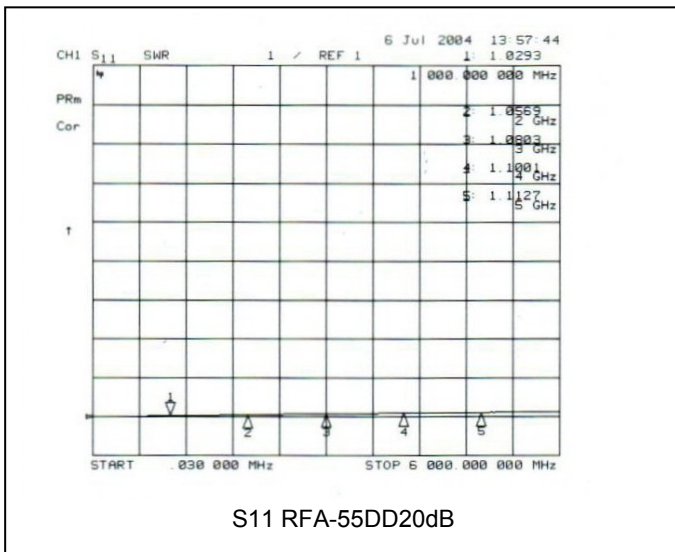
### Specifications

Items	Specifications	Test Conditions
Characteristic Impedance	50Ω / 75Ω	
Tolerance of Impedance	+/- 2% (G)	Input DC resistance in terminating output with resistor.
Tolerance of Attenuation	See Bottom of first page.	Output DC volt in terminating out put with resistor when stable 1V DC volt source connect to input.
TC of Impedance	+/- 50ppm/deg C	TC of input DC resistance in terminating output with resistor.
TC of Attenuation	+/- 50ppm/deg C	TC of output DC volt in terminating out put with resistor when stable 1V DC volt source connect to input.
Rating Temperature	-55-70 deg C	
Soldering Heat	+/- 1%	DC resistance, 350C, 3 seconds dipping.
Soldering capability	95% covered	
Humidity	+/- 1%	Input DC resistance change Under condition of 40C temp and 90-95%RH, rating power ON-90min, OFF-30min, 1000h
Load Life	+/- 1%	Input DC resistance change. Under condition of 70C temp, rating power ON-90min, OFF-30min, 1000h
Operating Temperature	-55deg C - +155deg C	At hot spot of resistive material
Storage Temperature	-55deg C - +155deg C	1000 hours in excluding solder-ability and conductor damage

Note: Above specifications are applied to RFA-54D, RFA-55D, RFA-85D, RFA-67D and RFA-37D.



COAXIAL RF POWER ATTENUATORS  
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\* Please call factory for a specification of RFA-68DD