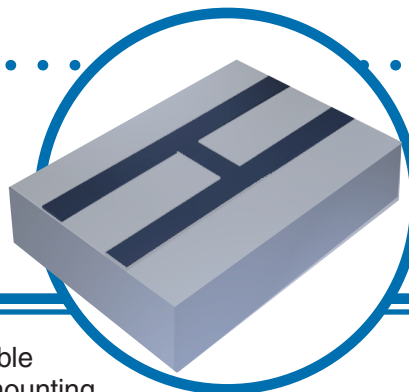


# High Frequency Surface Mount Attenuators

## RFAXX Series

- Low return loss
- RoHS compliant
- High power chip attenuators
- Long life, temperature stable thin film on ceramic technology



The RFAXX series of 50Ω high frequency attenuators are available in a variety of sizes and termination styles to suit applications for mounting on heat sinks or normal PC board materials. High thermal conductivity aluminum nitride substrates provide the low resistance thermal path for high power dissipation applications. Frequency performance up to 4GHz assures proper operation in RF and microwave power amplifiers, RF transmitters and receivers and RF power sources.

## Electrical Data

		RFA53SDLF	RFA54DDLDF	RFA55SDLF	RFA55DDLDF
<b>Frequency Range</b>		DC to 4GHz	DC to 4GHz	DC to 4GHz	DC to 4GHz
<b>Power Rating @ 70°C</b>		0.25W	0.25W	0.25W	0.25W
<b>Attenuation</b>	±0.2 dB	1, 2, 3, 4, 5, 6dB			
	±0.3 dB	7, 8, 9, 10dB			
	±0.4 dB	20, 30, 40dB			
<b>Impedance</b>		50Ω ±2%			
<b>Absolute TCR</b>		±50ppm/°C			
		RFA84SDLF	RFA84DDLDF	RFA37DDLDF	
<b>Frequency Range</b>		DC to 1GHz	DC to 1GHz	DC to 1GHz	
<b>Power Rating @ 70°C</b>		0.50W	0.50W	1.0W	
<b>Attenuation</b>	±0.2 dB	1, 2, 3, 4, 5, 6dB			
	±0.3 dB	7, 8, 9, 10dB			
	±0.4 dB	20, 30, 40dB			
<b>Impedance</b>		50Ω ±2%			
<b>Absolute TCR</b>		±50ppm/°C			

### General Note

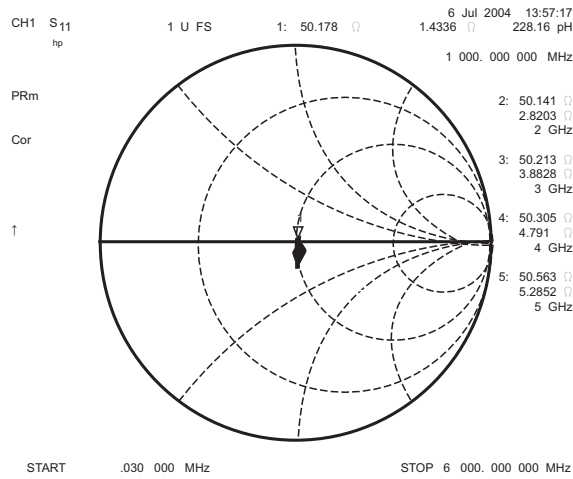
IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

# High Frequency Surface Mount Attenuators

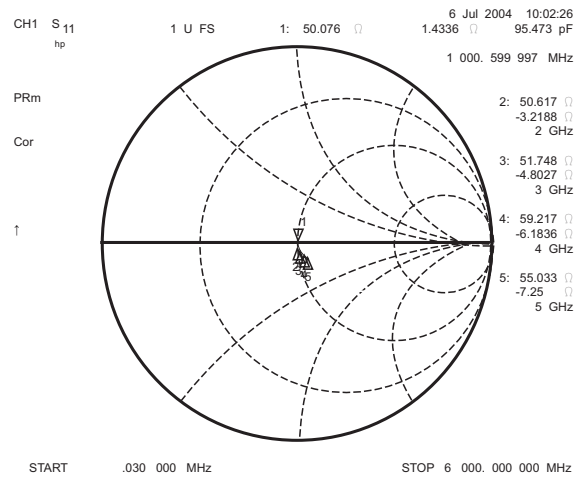


## Frequency Performance Data

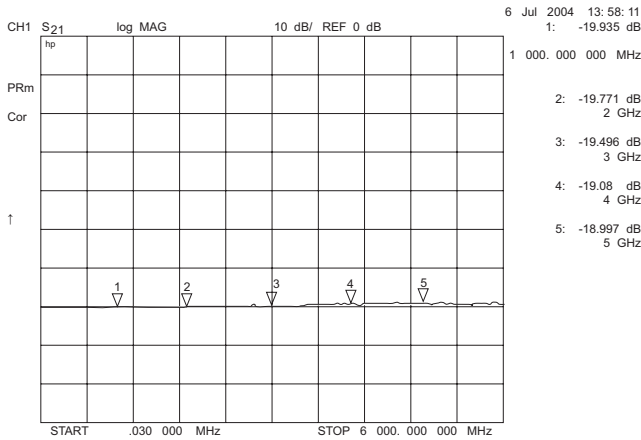
RFA55DDL20dB Impedance



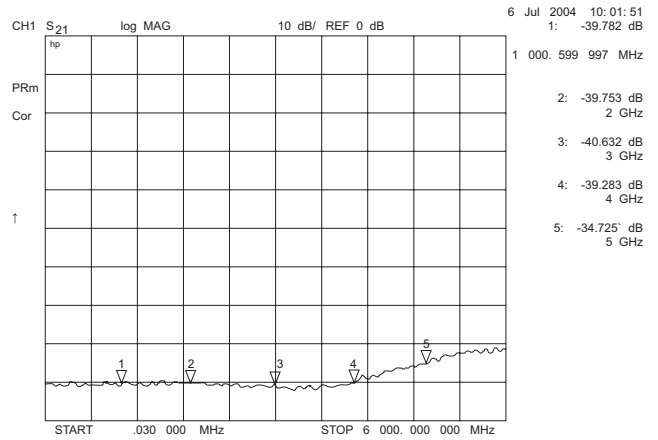
RFA55DDL40dB Impedance



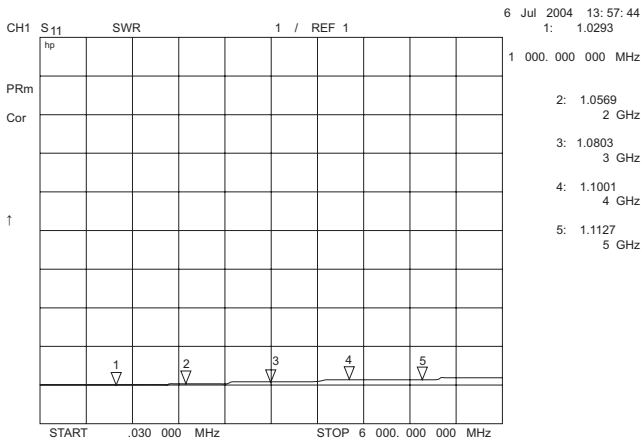
RFA55DDL20dB Attenuation



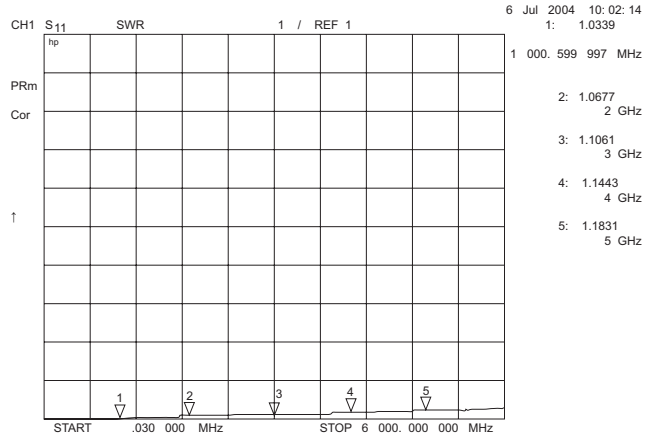
RFA55DDL40dB Attenuation



RFA55DDL20dB VSWR

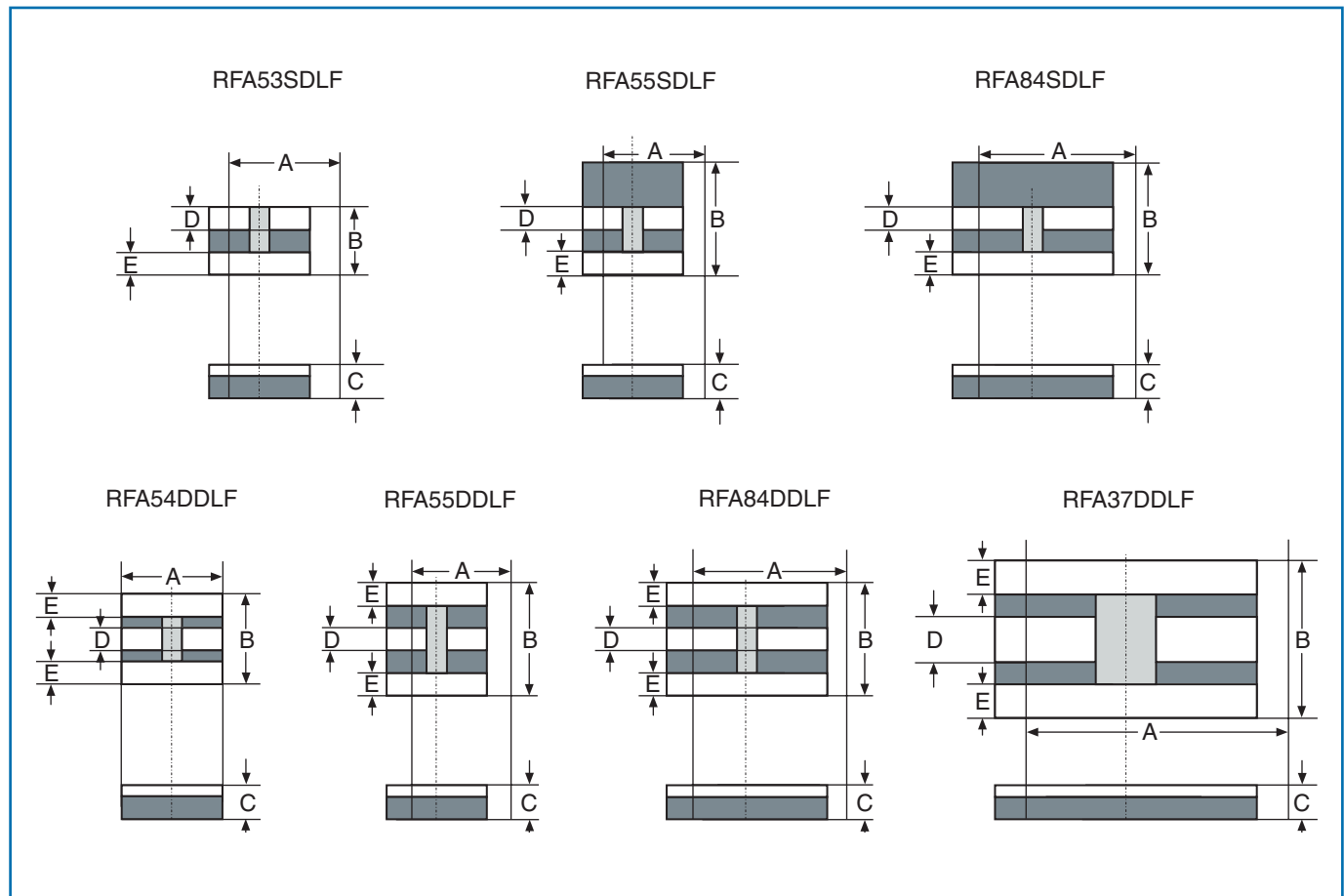


RFA55DDL40dB VSWR



# High Frequency Surface Mount Attenuators

## Physical Data



Dimensions (mm)

Model	A	B	C	D	E
RFA53SDF	5.00	2.70	0.70	1.20	0.80
RFA54DDL	5.00	3.80	0.70	1.20	0.80
RFA55SDF	5.00	4.50	0.70	1.20	1.00
RFA55DDL	5.00	4.50	0.70	1.20	1.00
RFA84SDF	8.00	5.25	0.70	1.40	1.10
RFA84DDL	8.00	5.25	0.70	1.40	1.10
RFA37DDL	13.00	7.00	0.70	2.00	1.40

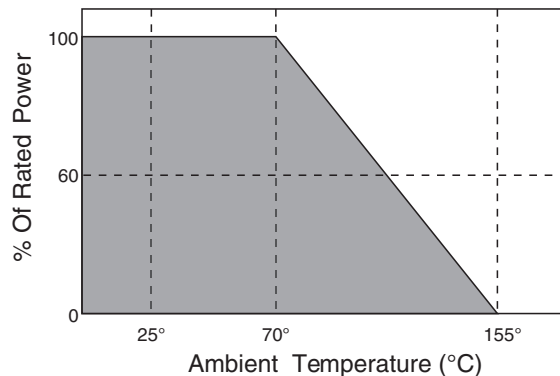
# High Frequency Surface Mount Attenuators



## Environmental Data

	Test Condition	Maximum
Load Life	1000 Hours, 70°C	±1.0%
Moisture Load Life	1000 Hours, 40°C 95% RH	±1.0%
Solder Heat Resistance	350°C, 3 sec.	±1.0%
Solderability		>95% coverage

## Power Derating Curve



## Ordering Data

Prefix ..... **HFR** - **RFA53SDLF** - **10dB** **G** **Z00**

**Model** .....  
 RFA53SDLF; RFA54DDLDF; RFA55SDLF; RFA55DDLDF  
 RFA84SDLF; RFA84DDLDF; RFA37DDLDF

**Attenuation** .....  
 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40dB

**Impedance Tolerance** .....  
 G = ±2%

**Packaging** .....  
 Z00 = 100 pcs/bulk package