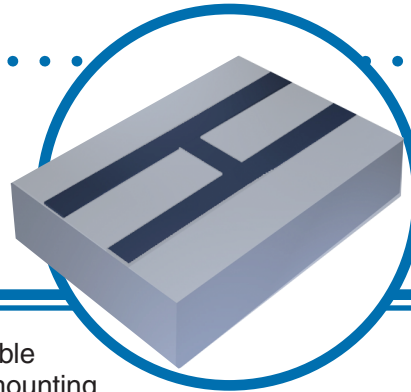


High Frequency Surface Mount Attenuators

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

General Note

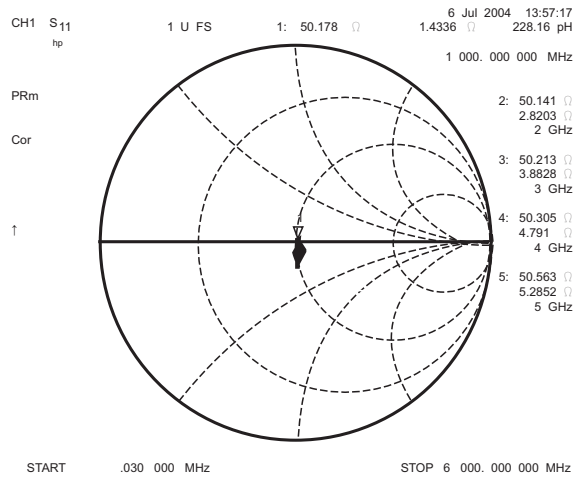
IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

High Frequency Surface Mount Attenuators

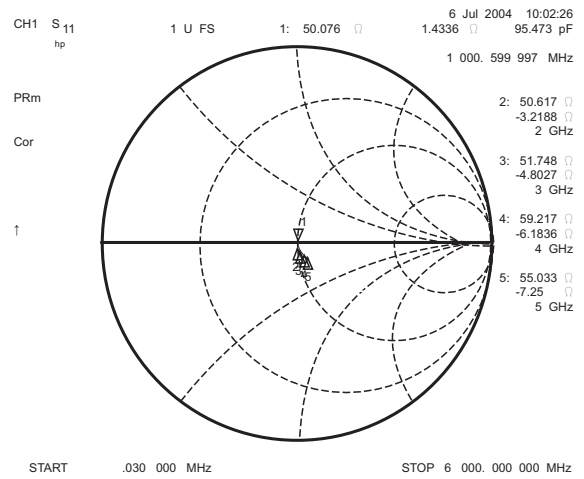


Frequency Performance Data

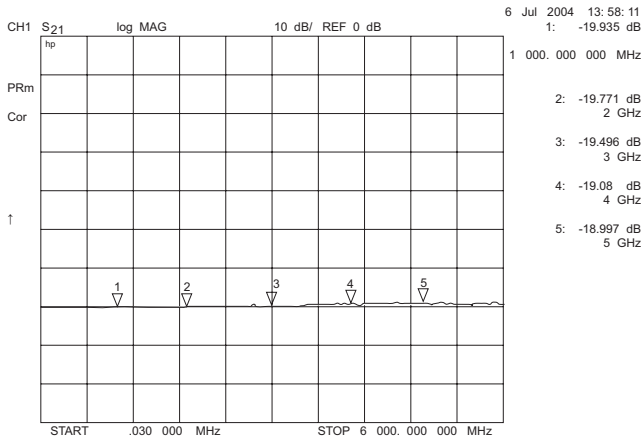
RFA55DDL20dB Impedance



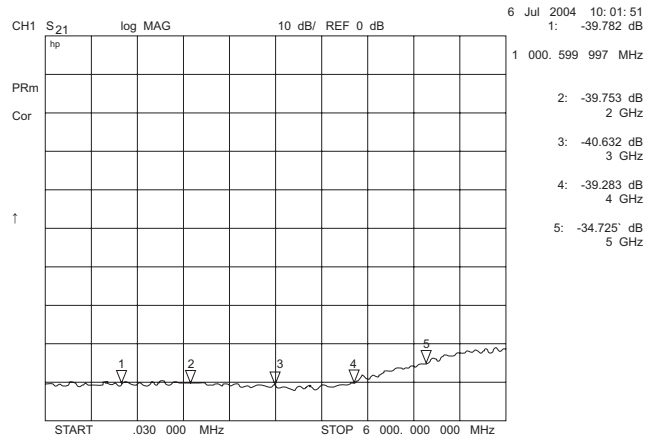
RFA55DDL40dB Impedance



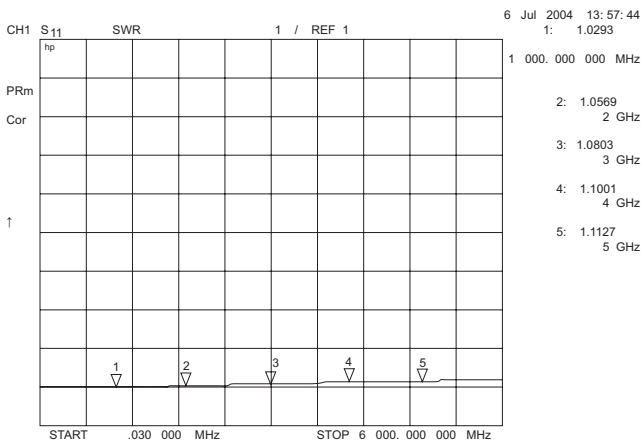
RFA55DDL20dB Attenuation



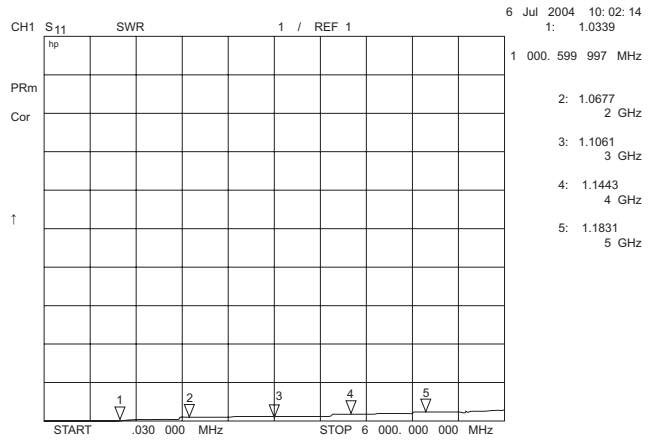
RFA55DDL40dB Attenuation



RFA55DDL20dB VSWR

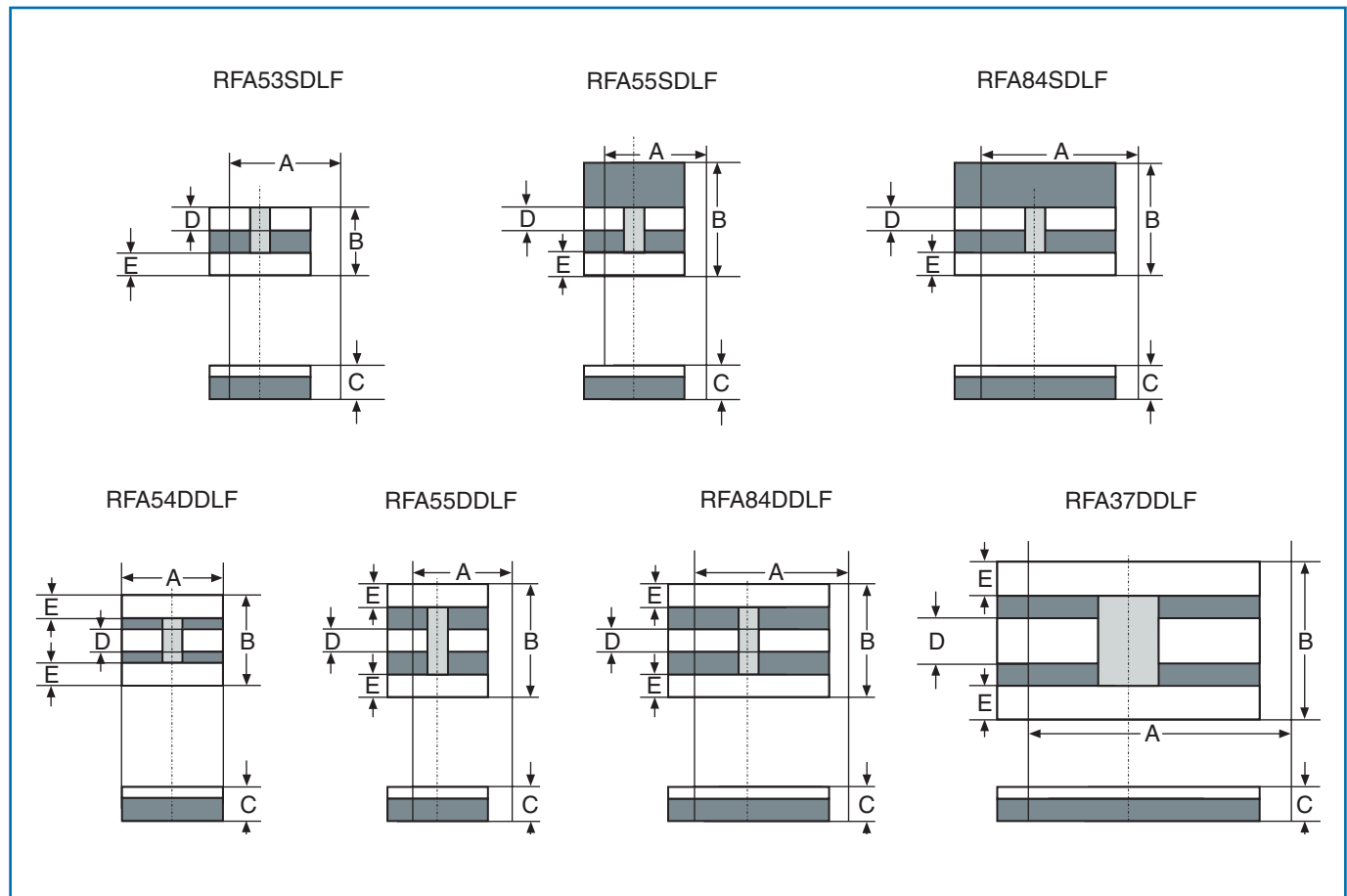


RFA55DDL40dB VSWR



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

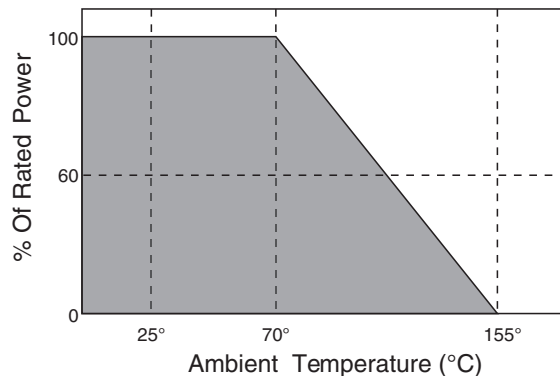
High Frequency Surface Mount Attenuators



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; RFA54DDL; RFA55SDLF; RFA55DDL
 RFA84SDLF; RFA84DDL; RFA37DDL

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

Impedance Tolerance
 G = ±2%

Packaging
 Z00 = 100 pcs/bulk package