



Typical Characteristics For DTA-26R5G40G-30-CD-1



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Reported by: Kevin Mansfield



Typical Characteristics For DTA-26R5G40G-30-CD-1

+25°C

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	PASS/FAIL	QA QC
1	Frequency Range:	26.5 GHz – 40 GHz	26.5 GHz – 40 GHz	
2	Insertion Loss:	26.5 - 40 GHz 6.0 dB Max.	5.75 dB	
3	VSWR:	2.5 : 1 Max.	2.32 : 1	
4	Monotonicity	Verify	PASS	
5	Flatness @ 10dB:		± 0.73 dB	
6	Flatness @ 20dB:		± 1.17 dB	
7	Flatness @ 30dB:		± 1.74 dB	
8	Accuracy of Attenuation 0 to 10 dB:	± 2 dB	± 0.25 dB	
9	Accuracy of Attenuation 10 to 20 dB:	± 2 dB	± 0.38 dB	
10	Accuracy of Attenuation 20 to 30 dB:	± 2 dB	± 0.6 dB	
11	Switching Speed:	1.0 uSEC MAX	0.30 uSEC	
12	DC Supply:	+12VDC @ 50 mA	+12 VDC @ 48 mA	

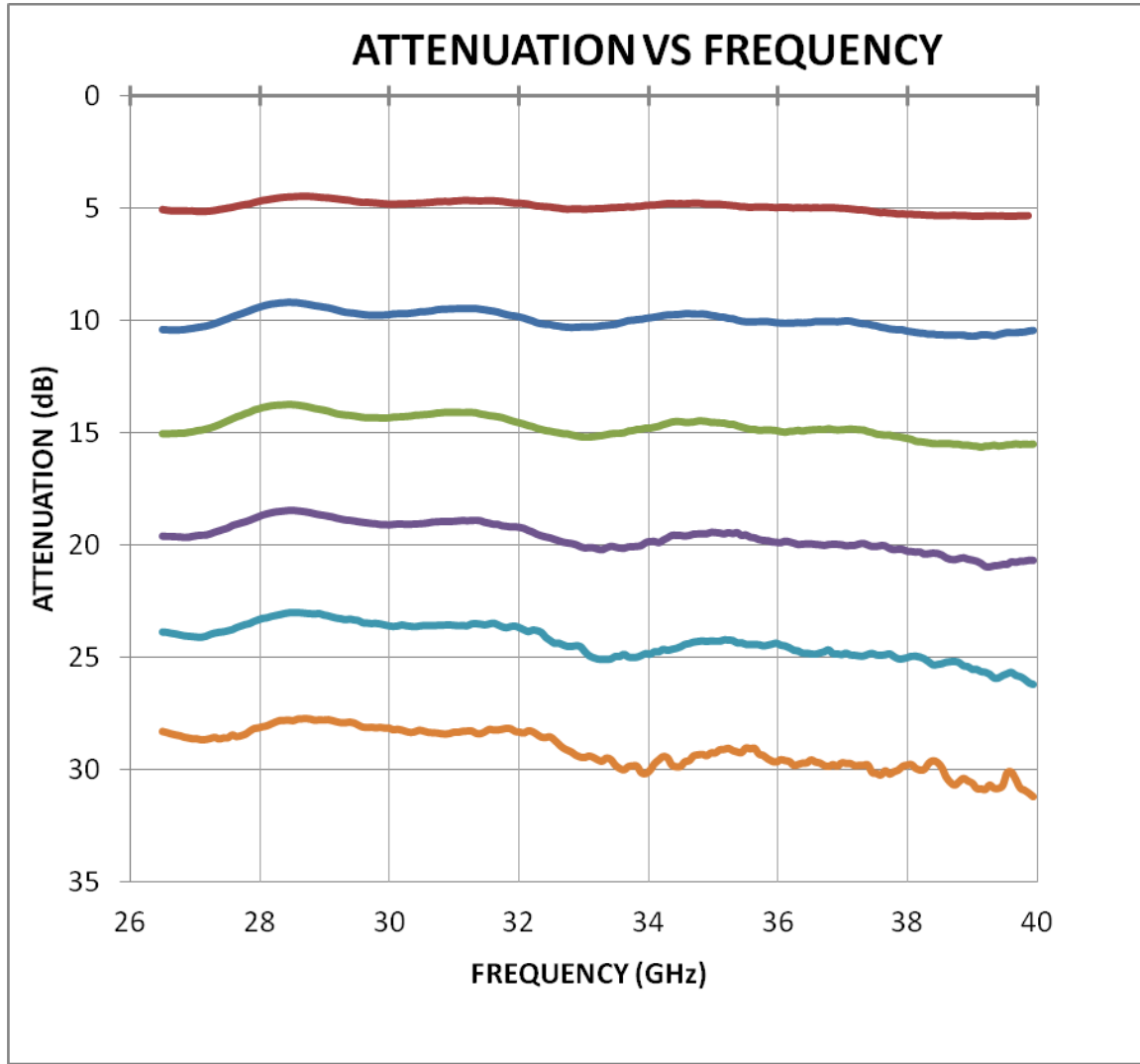
Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness dB
dB	dB	dB	±dB
1.00	0.96	0.04	0.13
2.00	2.25	-0.25	0.24
4.00	4.06	-0.06	0.40
8.00	7.15	0.85	0.62
16.00	14.67	1.33	0.96

Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness dB
dB	dB	dB	±dB
5.00	4.90	0.10	0.46
10.00	9.10	0.90	0.73
15.00	13.74	1.26	0.91
20.00	18.62	1.38	1.17
25.00	23.49	1.51	1.42
30.00	28.73	1.27	1.74



Typical Characteristics For DTA-26R5G40G-30-CD-1

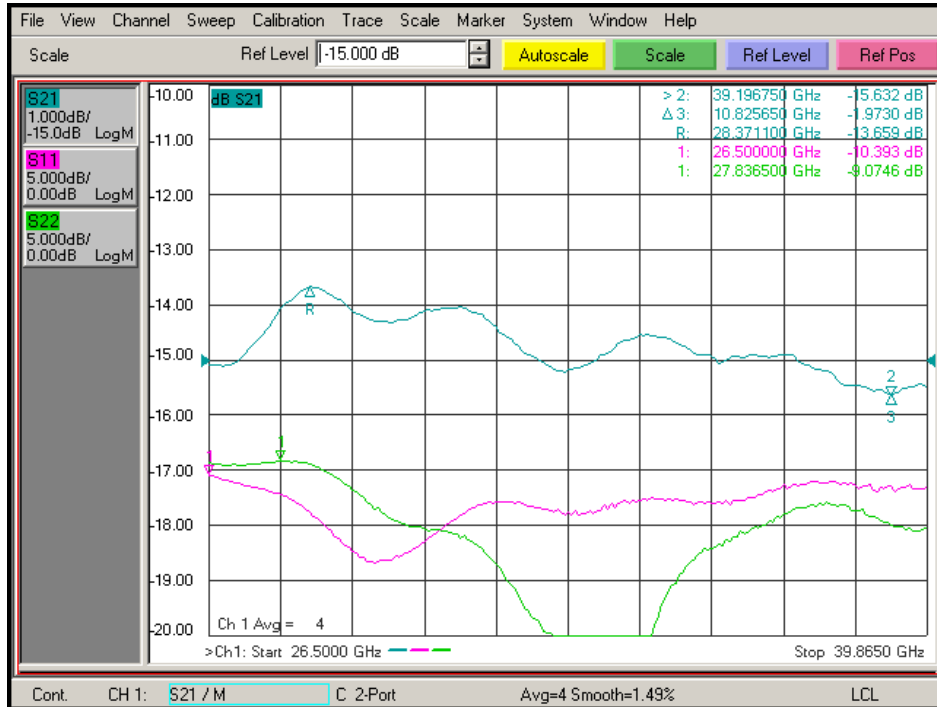
+25°C Attenuation vs. Frequency Plot





Typical Characteristics For DTA-26R5G40G-30-CD-1

+25°C @ -15dB Attenuation



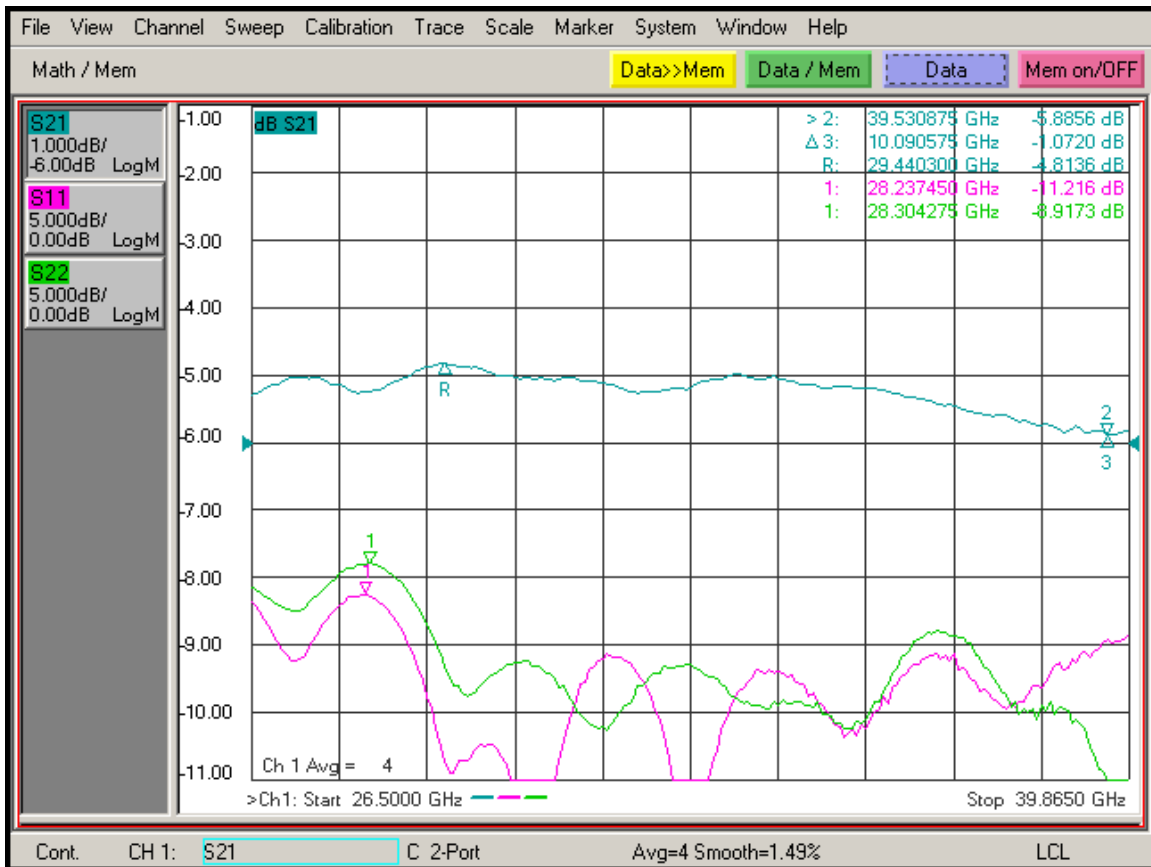
+25°C @ -30dB Attenuation





Typical Characteristics For DTA-26R5G40G-30-CD-1

+25°C Insertion Loss & Return Loss





Typical Characteristics For DTA-26R5G40G-30-CD-1

-40°C

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	PASS/FAIL	QA QC
1	Frequency Range:	26.5 GHz – 40 GHz	26.5 GHz – 40 GHz	
2	Insertion Loss:	26.5 - 40 GHz 6.0 dB Max.	5.5 dB	
3	VSWR:	2.5 : 1 Max.	2.37 : 1	
4	Monotonicity	Verify	PASS	
5	Flatness @ 10dB:		± 0.63 dB	
6	Flatness @ 20dB:		± 1.21 dB	
7	Flatness @ 30dB:		± 1.89 dB	
8	Accuracy of Attenuation 0 to 10 dB:	± 2 dB	± 0.98 dB	
9	Accuracy of Attenuation 10 to 20 dB:	± 2 dB	± 1 dB	
10	Accuracy of Attenuation 20 to 30 dB:	± 2 dB	± 1.42 dB	
11	Switching Speed:	1.0 uSEC MAX	0.30 uSEC	
12	DC Supply:	+12VDC @ 50 mA	+15 VDC @ 38 mA	

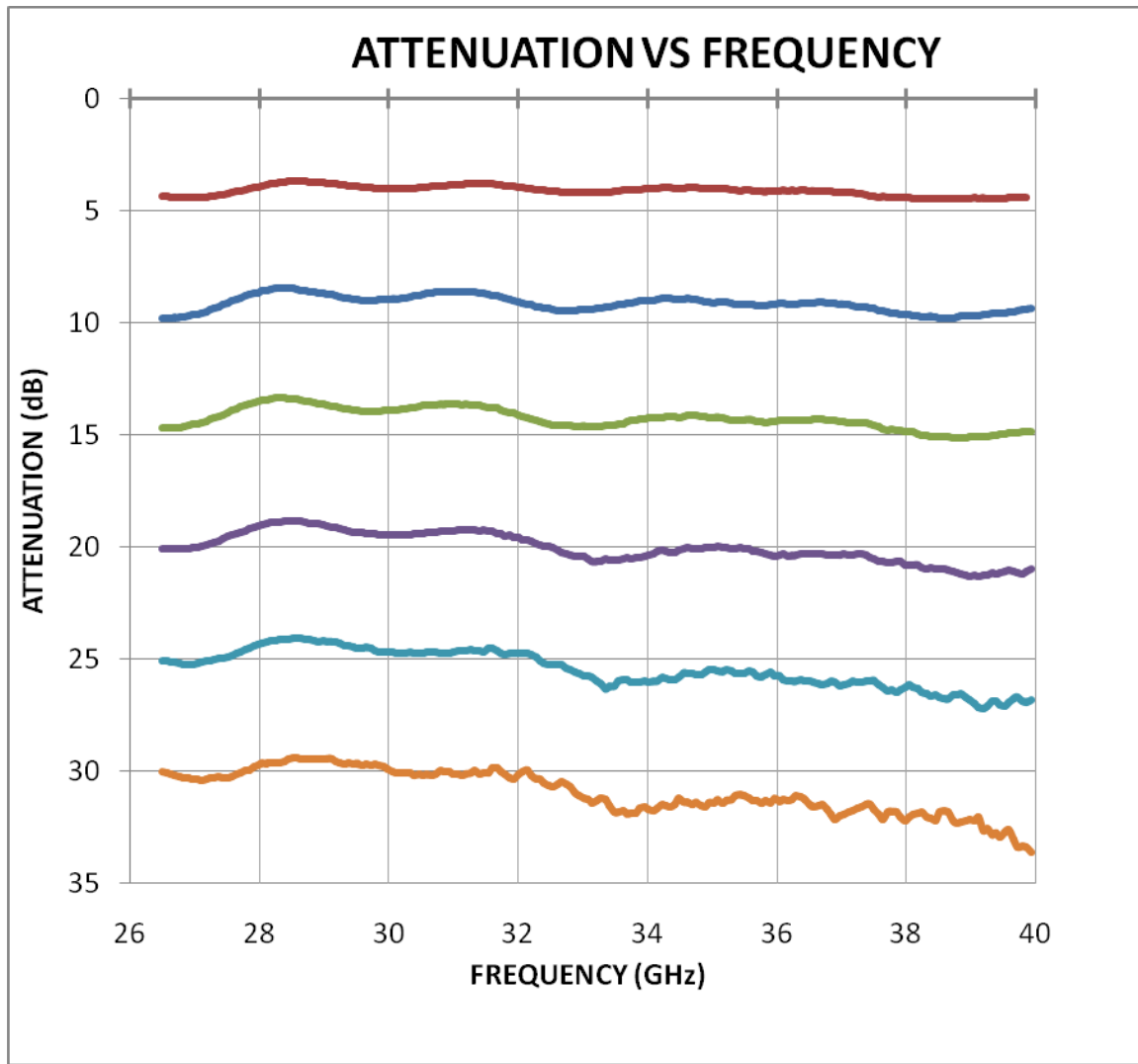
Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness
dB	dB	dB	±dB
1.00	0.72	0.28	0.11
2.00	1.67	0.33	0.21
4.00	3.29	0.71	0.35
8.00	6.34	1.66	0.57
16.00	14.24	1.76	0.90

Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness
dB	dB	dB	±dB
5.00	4.07	0.93	0.40
10.00	8.28	1.72	0.63
15.00	13.18	1.82	0.85
20.00	18.87	1.13	1.21
25.00	24.55	0.45	1.48
30.00	30.42	-0.42	1.89



Typical Characteristics For DTA-26R5G40G-30-CD-1

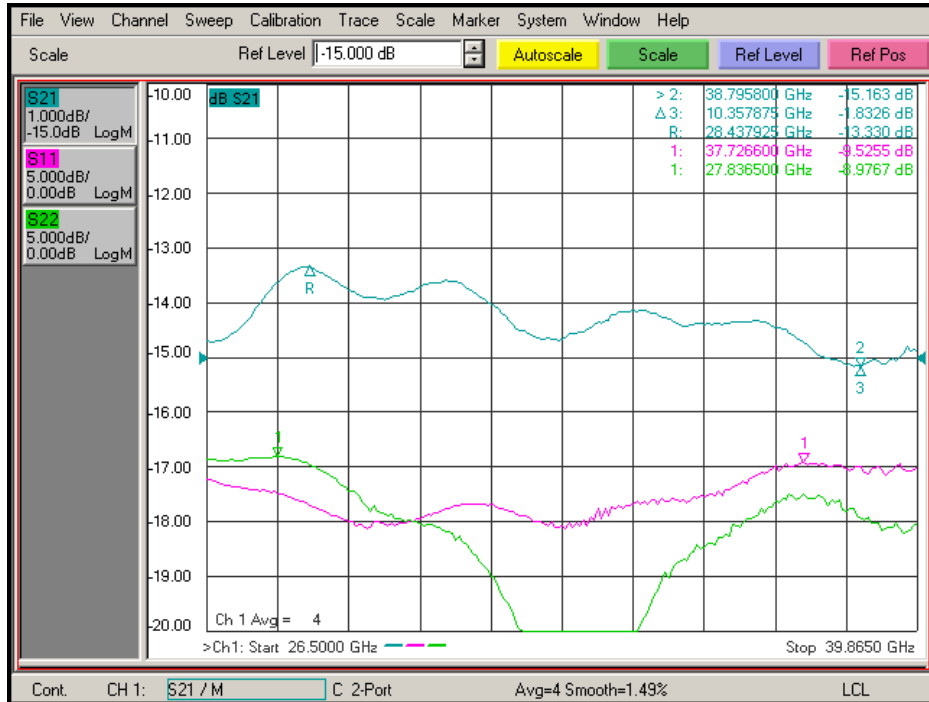
-40°C Attenuation vs. Frequency Plot





Typical Characteristics For DTA-26R5G40G-30-CD-1

-40°C @ -15dB Attenuation



-40°C @ -30dB Attenuation





Typical Characteristics For DTA-26R5G40G-30-CD-1

+85°C

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	PASS/FAIL	QA QC
1	Frequency Range:	26.5 GHz – 40 GHz	26.5 GHz – 40 GHz	
2	Insertion Loss:	26.5 - 40 GHz 6.0 dB Max.	6.5 dB	
3	VSWR:	2.5 : 1 Max.	2.32 : 1	
4	Monotonicity	Verify	PASS	
5	Flatness @ 10dB:		± 0.78 dB	
6	Flatness @ 20dB:		± 1.29 dB	
7	Flatness @ 30dB:		± 1.8 dB	
8	Accuracy of Attenuation 0 to 10 dB:	± 2 dB	± 1.01 dB	
9	Accuracy of Attenuation 10 to 20 dB:	± 2 dB	± 1.07 dB	
10	Accuracy of Attenuation 20 to 30 dB:	± 2 dB	± 0.91 dB	
11	Switching Speed:	1.0 uSEC MAX	0.30 uSEC	
12	DC Supply:	+12VDC @ 50 mA	+15 VDC @ 38 mA	

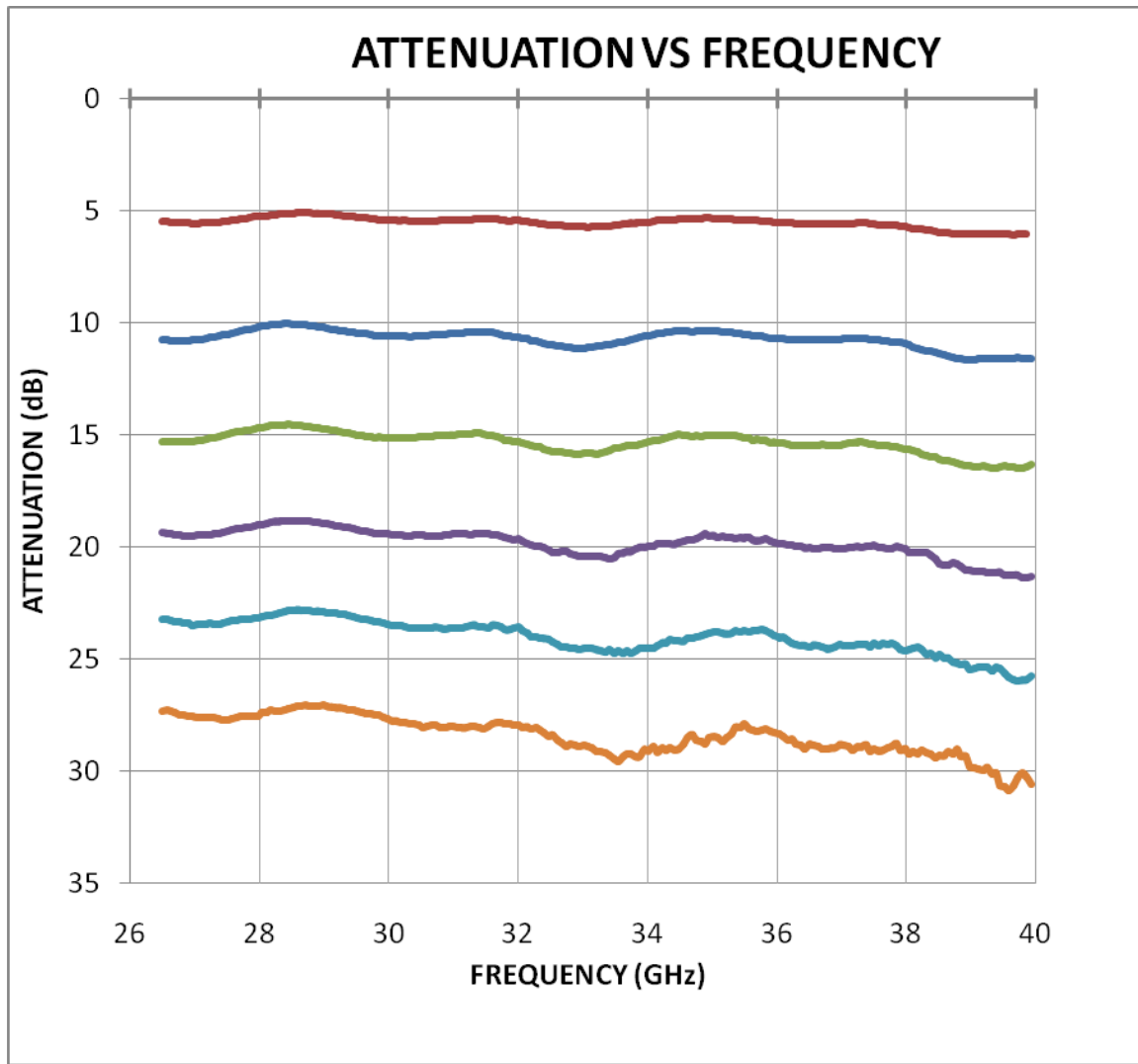
Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness dB
dB	dB	dB	±dB
1.00	1.18	-0.18	0.13
2.00	2.71	-0.71	0.24
4.00	4.75	-0.75	0.44
8.00	8.01	-0.01	0.67
16.00	15.51	0.49	0.98

Programed Attenuation	Attenuation	Accuracy of Attenuation	Flatness dB
dB	dB	dB	±dB
5.00	5.57	-0.57	0.49
10.00	9.97	0.03	0.78
15.00	14.68	0.32	0.96
20.00	19.20	0.80	1.29
25.00	23.51	1.49	1.46
30.00	28.24	1.76	1.80



Typical Characteristics For DTA-26R5G40G-30-CD-1

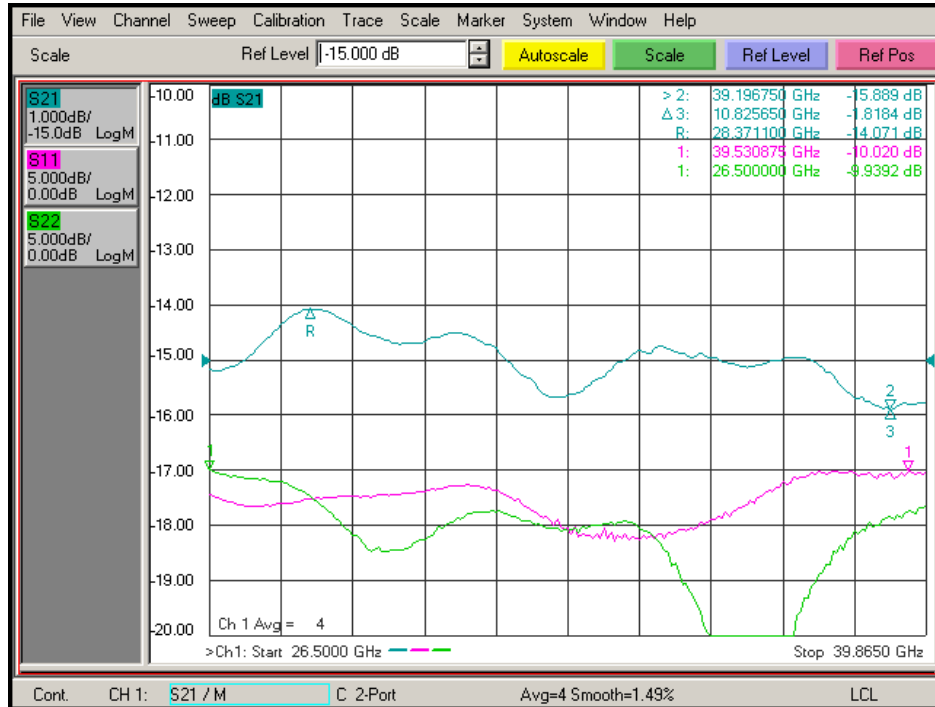
+85°C Attenuation vs. Frequency Plot





Typical Characteristics For DTA-26R5G40G-30-CD-1

+85°C @ -15dB Attenuation



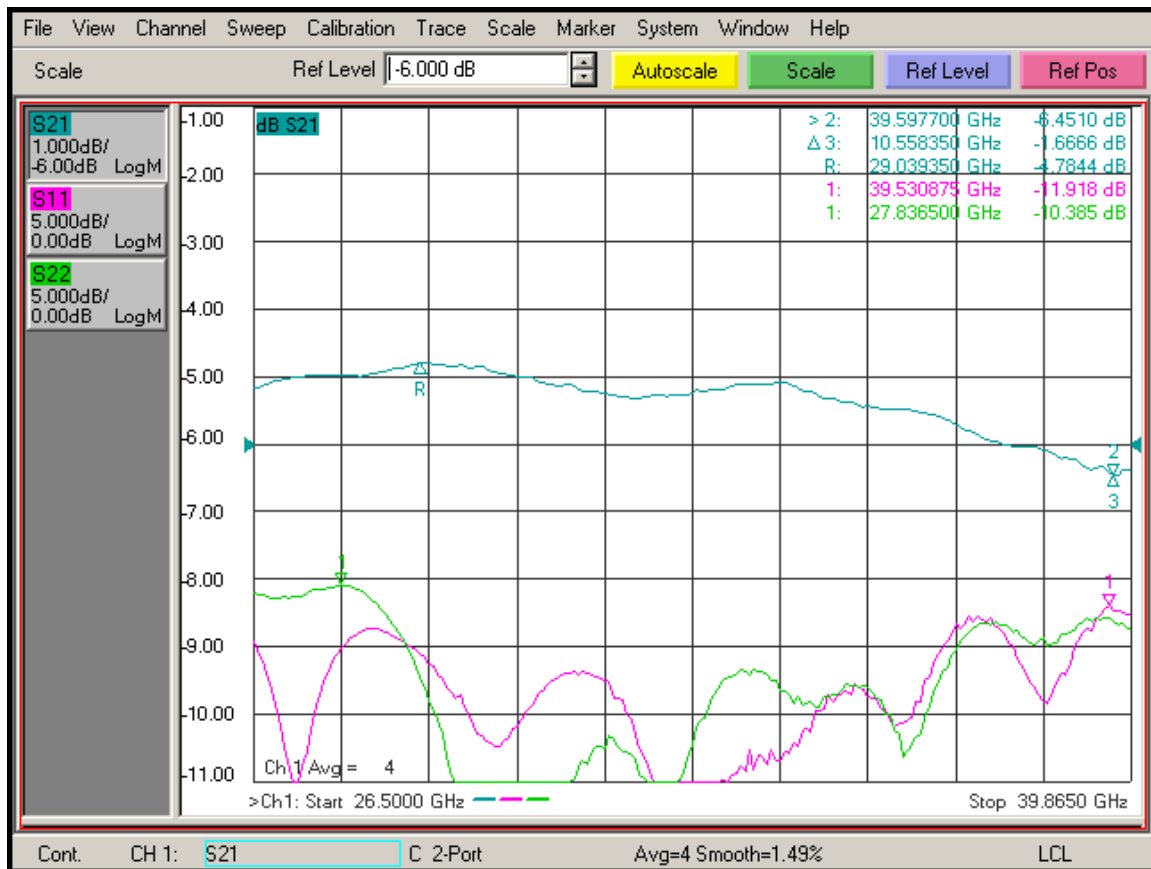
+85°C @ -30dB Attenuation





Typical Characteristics For DTA-26R5G40G-30-CD-1

+85°C Insertion Loss & Return Loss



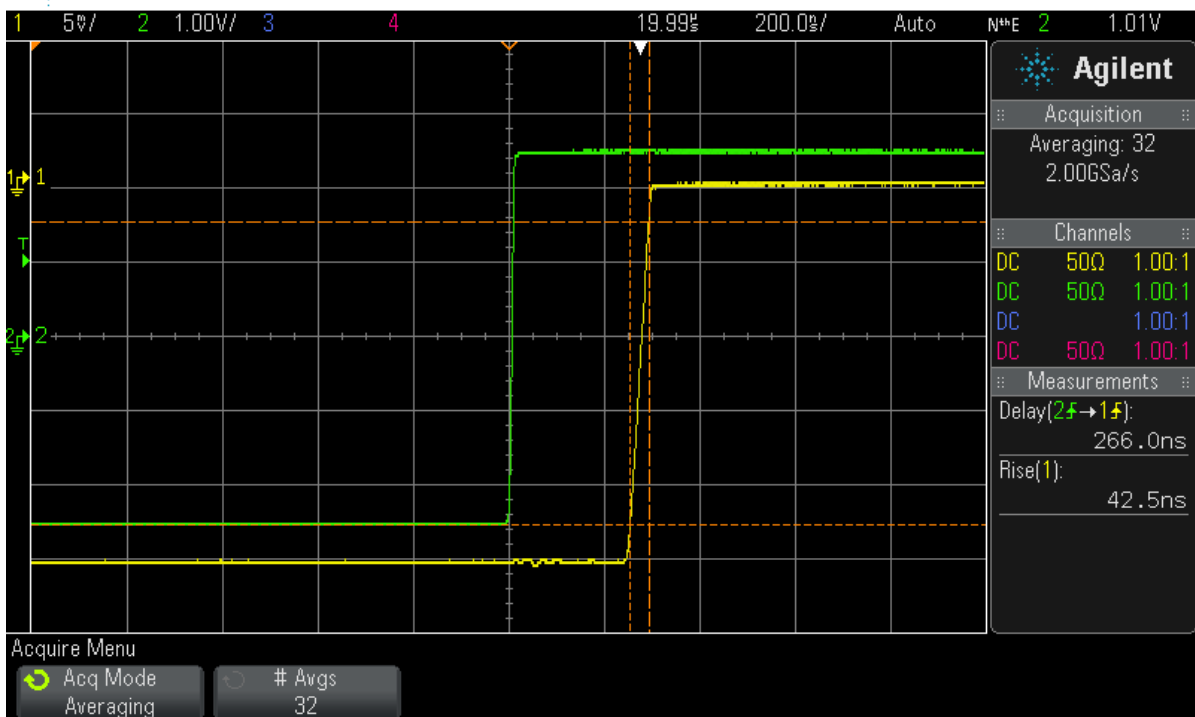


Typical Characteristics For DTA-26R5G40G-30-CD-1

Delay On
Measured with a Tunnel Diode @ 30GHz
Input Power @ -5dBm



Sat Jan 28 05:12:44 2012



Channel 1 (Yellow): Tunnel Diode output

Channel 2 (Green): TTL Input from Signal Generator



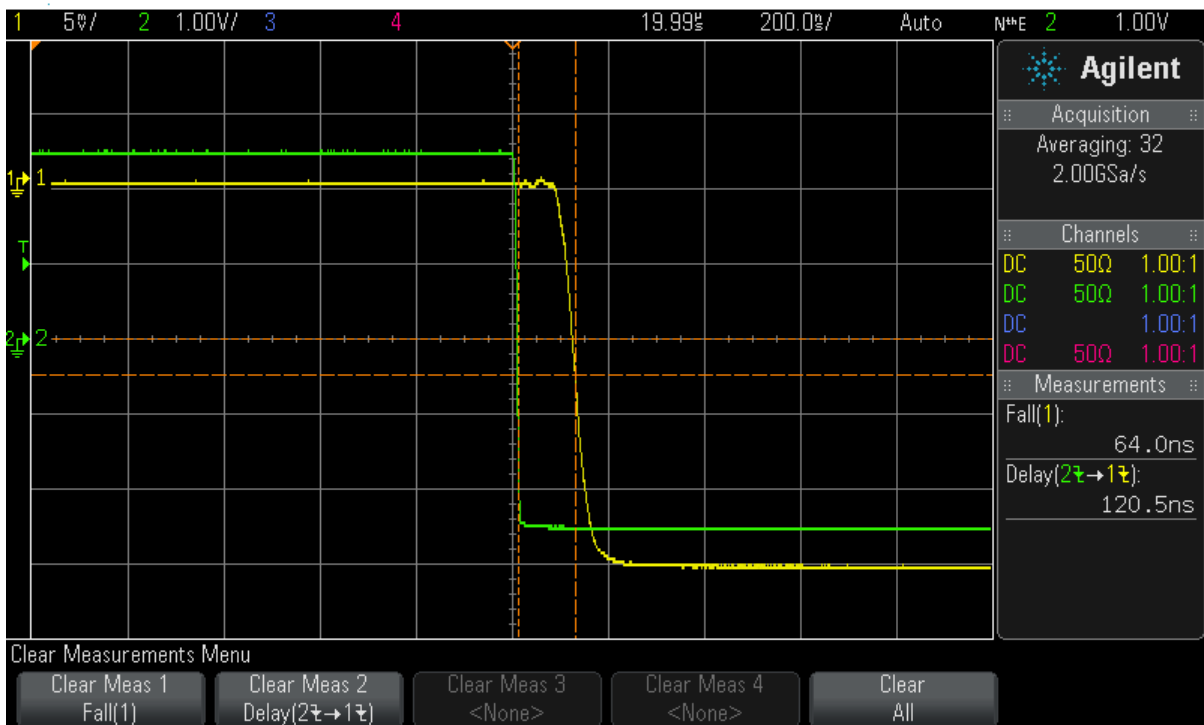
Typical Characteristics For DTA-26R5G40G-30-CD-1

Delay Off
Measured with a Tunnel Diode @ 30GHz
Input Power @ -5dBm



Agilent Technologies

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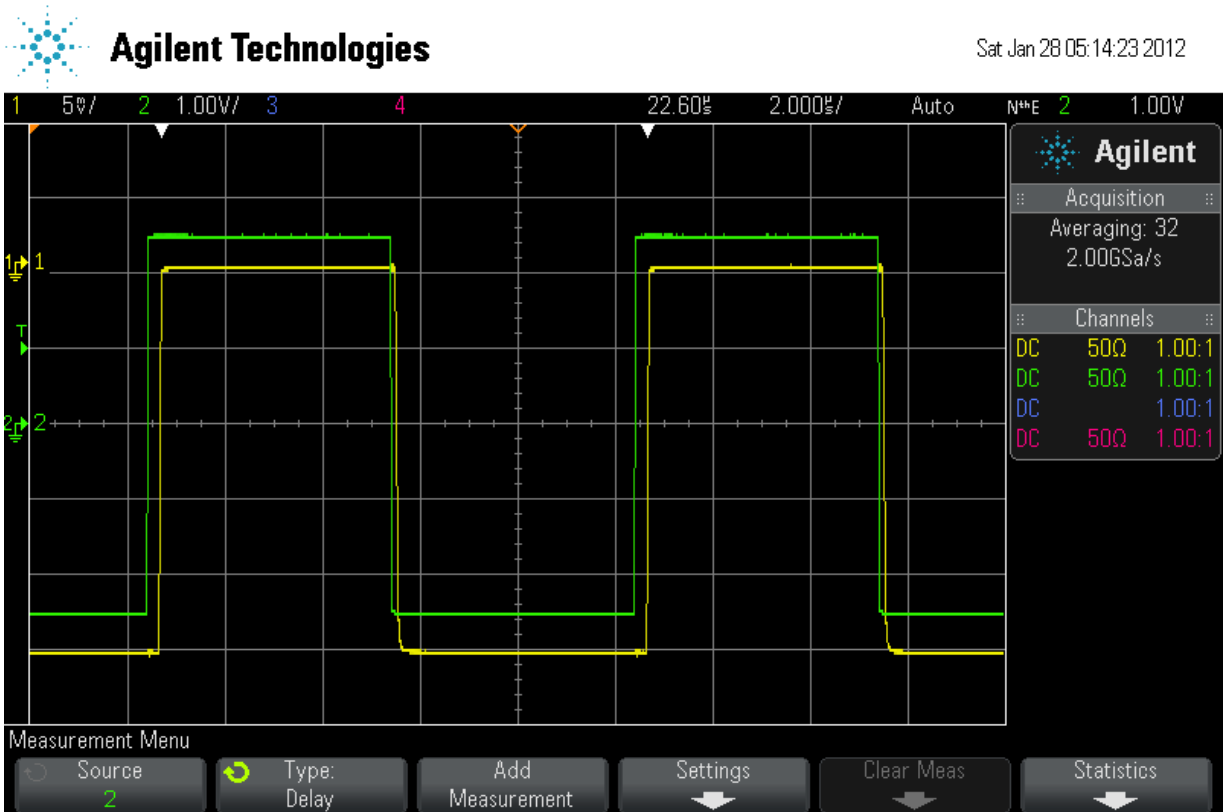
Channel 1 (Yellow): Tunnel Diode output

Channel 2 (Green): TTL Input from Signal Generator



Typical Characteristics For DTA-26R5G40G-30-CD-1

Full Pulse
Measured with a Tunnel Diode @ 30GHz
Input Power @ -5dBm



Channel 1 (Yellow): Tunnel Diode output

Channel 2 (Green): TTL Input from Signal Generator