



## Attenuators

### High Performance Attenuators Typical and Guaranteed Specifications—50 Ω System

Model	Frequency Range MHz	Insertion Loss dB		Attenuation dB		SWR In/Out		Switching Speed		Control		Bias	
		Typ.	Max. 0/50C	Typ.	Min. 0/50C	Typ.	Max. 0/50C	Typ. (μs) 10-90%	Max. (μs) 100%	Volts	I(mA) Max.	Volts	I(mA) Max.
<b>Attenuators • Available in TO-8 Attenuator, Surface Mount and SMA Packages (depending on model)</b>													
UTF-015	5-500	1.5	2.0	20	15	1.5	2.0	500	800	0 to 10	0 to 7	15	10
	500-1000	2.0	2.5	20	15	1.6	2.1	500	800	0 to 10	0 to 7	15	10
GC1275 (75Ω)	5-500	2.0	2.6	36	30	1.3	2.0	2.0	125	0 to 15	0 to 7	15	15
	5-1000	2.3	2.8	30	25	1.6	2.0	2.0	125	0 to 15	0 to 7	15	15
	5-1200	2.5	3.0	27	23	1.6	2.0	2.0	125	0 to 15	0 to 7	15	15
GC2001	5-500	2.0	2.5	36	31	1.5	2.0	2.0	125	0 to 15	0 to 7	15	15
	5-1000	2.0	2.5	30	25	1.5	2.0	2.0	125	0 to 15	0 to 7	15	15
	5-2000	2.8	3.3	23	20	1.6	2.2	2.0	125	0 to 15	0 to 7	15	15
GC2002	5-500	1.5	2.0	35	31	1.6	1.8	2.0	125	0 to 15	0 to 7	5	10
	5-1000	2.0	2.5	29	25	1.6	1.8	2.0	125	0 to 15	0 to 7	5	10
	5-2000	2.5	3.0	23	20	1.7	2.2	2.0	125	0 to 15	0 to 7	5	10
UTF-025	5-500	2.0	2.5	33	27	1.5	2.0	75	200	1 to 15	0 to 7	15	20
	500-1000	2.0	2.5	28	23	1.5	2.0	75	200	1 to 15	0 to 7	15	20
	1000-2000	2.8	3.3	23	20	1.8	2.0	75	200	1 to 15	0 to 7	15	20
	2000-2500	3.5	4.0	17	15	1.8	2.0	75	200	1 to 15	0 to 7	15	20
GC2510	10-500	2.0	2.8	52	40	1.2	1.8	<1.5	9.0	0 to 15	0 to 10	15	12
	500-1000	2.3	2.8	43	35	1.2	1.8	<1.5	9.0	0 to 15	0 to 10	15	12
	1000-2000	2.8	3.3	38	30	1.2	2.0	<1.5	9.0	0 to 15	0 to 10	15	12
	2000-2500	3.0	3.5	35	28	<1.3	2.2	<1.5	9.0	0 to 15	0 to 10	15	12
GC2530	10-500	2.0	2.8	52	40	1.2	1.8	200 ηsec	1.0	0 to 15	0 to 10	15	12
	500-1000	2.3	2.8	43	35	1.2	1.8	200 ηsec	1.0	0 to 15	0 to 10	15	12
	1000-2000	2.8	3.3	38	30	1.2	2.0	200 ηsec	1.0	0 to 15	0 to 10	15	12
	2000-2500	3.0	3.5	35	28	<1.3	2.2	200 ηsec	1.0	0 to 15	0 to 10	15	12
UTF-040	30-250	2.0	2.2	45	40	1.5	2.0	400	600	0 to -10	0 to 75	15	10
	250-500	2.0	2.2	40	35	1.5	2.0	400	600	0 to -10	0 to 75	15	10
	500-1000	2.0	2.5	35	30	1.5	2.5	400	600	0 to -10	0 to 75	15	10
UTF-030	100-500	2.0	2.5	45	40	1.7	2.0	0.5	2	0 to 15	0 to 10	15	10
	500-1000	2.5	3.0	40	35	1.7	2.0	0.5	2	0 to 15	0 to 10	15	10
	1000-2000	3.0	3.5	30	25	1.7	2.0	0.5	2	0 to 15	0 to 10	15	10
GC2534	500-1000	2.3	2.8	43	35	1.2	1.8	<100 ηsec	1.0	0 to 15	0 to 10	15	12
	1000-2000	2.8	3.3	38	30	1.2	2.0	<100 ηsec	1.0	0 to 15	0 to 10	15	12
	2000-2500	3.0	3.5	35	28	<1.3	2.2	<100 ηsec	1.0	0 to 15	0 to 10	15	12



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Model	Frequency Range MHz	Insertion Loss dB		Attenuation dB		SWR In/Out		Switching Speed		Control		Bias	
		Typ.	Max. 0/50C	Typ.	Min. 0/50C	Typ.	Max. 0/50C	Typ. (μs) 10-90%	Max. (μs) 100%	Volts	I(mA) Max.	Volts	I(mA) Max.
<b>Attenuators • Available in TO-8 Attenuator, Surface Mount and SMA Packages (depending on model)</b>													
GR2010 <sup>^</sup>	5-500	2.0	2.8	36	30	1.3	2.0	2.0	75	+2 to -10	0 to 15	15	40
	5-1000	2.3	3.0	30	25	1.6	2.0	2.0	75	+2 to -10	0 to 15	15	40
	5-2000	2.8	3.5	27	23	1.6	2.0	2.0	75	+2 to -10	0 to 15	15	40
UTF-035 <sup>1</sup>	50-1000	2.0	2.5	25.5	23.5	1.6	2.0	5	25	-2 to -10	0 to 40	15	50
	1000-2000	2.5	3.0	25.5	23.5	1.6	2.0	5	25	-2 to -10	0 to 40	15	50
PSF-030-25	100-1000	2.5	3.0	45	40	1.7	2.0	0.5	2.0	0 to 15	0 to 10	15	10
	1000-2000	2.5	3.0	40	35	1.7	2.0	0.5	2.0	0 to 15	0 to 10	15	10
	2000-4000	2.5	3.0	30	25	1.7	2.0	0.5	2.0	0 to 15	0 to 10	15	10
GRS6012	0.3-6000	2.0	4.5	20	18	1.8	2.0	<100 ηsec	160 ηsec	0 to -5		±5	3

Model	Frequency Range GHz	Insertion Loss dB		Attenuation dB		SWR In/Out		Switching Speed		Control	
		Typ.	Max. 0/50C	Typ.	Min. 0/50C	Typ.	Max. 0/50C	Typ. (μs) 10-90%	Max. (μs) 100%	Volts	I(mA) Max.
<b>Attenuators • Available in CougarPak<sup>®</sup> Connectorized Packages</b>											
GCP6021	2.0 - 6.0	1.5	2.5	17	15	1.5	1.8	3.8	4.5	5	26
	3.0 - 5.0	1.3	1.5	16	15	1.5	1.7	3.8	4.5	5	26
GCP8022	4.0 - 7.0	2.4	2.9	40	38	1.5	1.7	2.5	4.7	5	52
	3.0 - 8.0	3.0	3.5	40	37	1.5	1.7	2.5	4.7	5	52
GCP14021	5.0 - 8.0	2.2	2.7	22	20	2.0	2.2	2.0	4.5	5	25
	8.0 - 14.0	2.0	2.5	21	19	1.6	1.8	2.0	4.5	5	25
	14.0 - 15.0	2.8	3.0	22	20	1.3	1.5	2.0	4.5	5	25

Model	Frequency Range MHz	Typical Current Drain						Linearity Specifications <sup>^</sup>			
		Control Voltage=-10 V @ Min. Attenuation			Control Voltage=0 V @ Max. Attenuation			10-1000 MHz Attenuation Range: 0 to 20 dB 25°C		-55°/85°C	
		V-	V+	Vcon	V-	V+	Vcon	Typ.	Max.	Typ.	Max.
<b>Attenuator Linearizer • Available in Linearized TO-8 Attenuator and SMA Packages</b>											
LG2001 <sup>1</sup>	5-2000	5.0 mA	24.0 mA	15.0 mA	5.0 mA	11.0 mA	2.5 mA	<±1.0 dB	<±1.5 dB	<±1.5 dB	<±2.0 dB

Current data sheets available on website. <sup>1</sup> Linearizer and attenuator in one package.

<sup>^</sup> Specifications apply to LG2001 used in conjunction with model GC2001.