



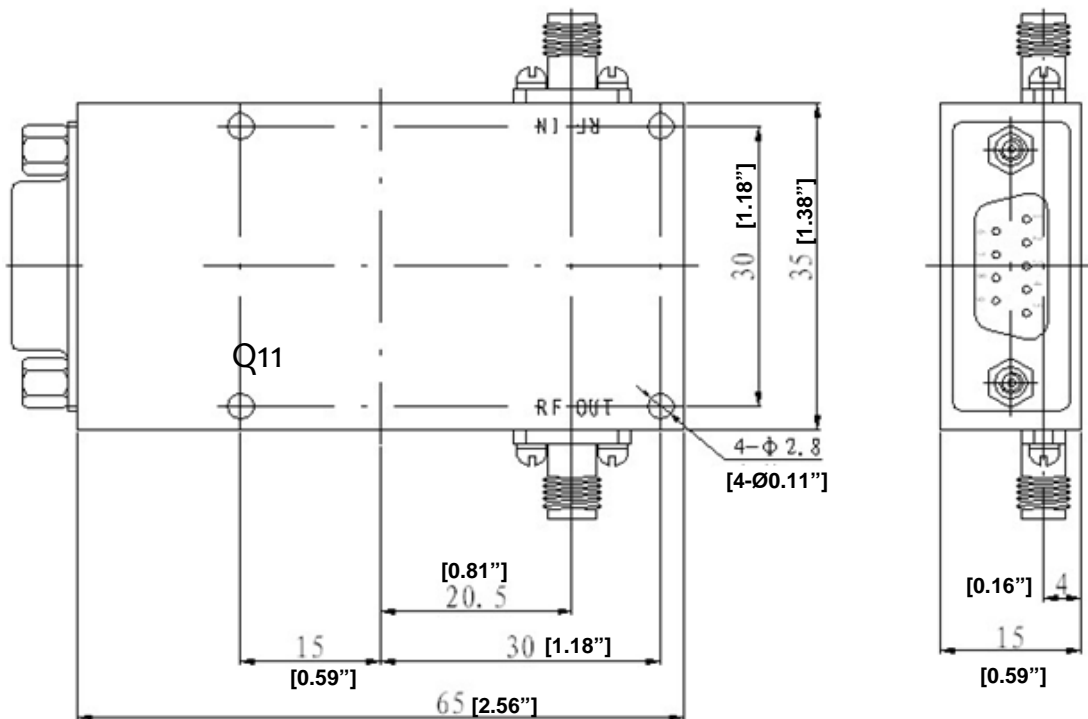
## Absorptive and Reflective 12-18GHz PIN Diode Digital Attenuator



- Wide Band Operation 12-18GHz
- High Power Handle up to 50W upon request.
- TTL compatible driver include
- Fast Switching Speed
- Low Insertion Loss good attenuation accuracy
- Temperature Range -55°C~+85°C
- Customization available upon request

Absorptive type digital control step attenuator						
Part Number	Frequency (GHz)	Insert. Loss (dB)	VSWR (Max:1)	Step / Range (dB)	Avg. Power (Watts)	Switching Speed (ns)
RFDAT1218G6A	12-18	5 dB *	2.0	1dB / 63dB	0.2	100~500
Reflective type digital control step attenuator						
Part Number	Frequency (GHz)	Insert. Loss (dB)	VSWR (Max:1)	Step / Range (dB)	Avg. Power (Watts)	Switching Speed (us)
RFDAT1218G6R	12-18	4 dB *	2.0	1dB / 63dB	0.2W~50W	1~10us

\* - Insertion loss variation over temperature 0.03dB/1°C

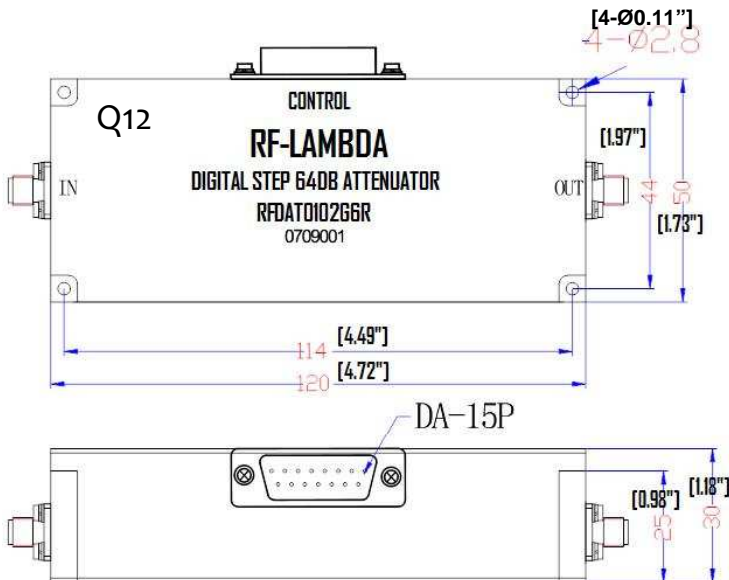




1.0	Mechanical Specifications	
1.1	Basis-material	Brass
1.2	Coaxial Connector	SMA Female
1.3	External Body Finish	Nickel plating

2.0	Environment specifications	
2.1	Operation Temp.	-40°C~+85°C
2.2	Storage Temp.	-50°C~+125°C
2.3	Altitude	45000 ft
2.4	Vibration	10g rms (15 degree 2KHz)
2.5	Humidity	100% RH at 35c, 95%RH at 40 deg c
2.6	Shock	20G for 11msc

3.0	Electrical Specifications																																																									
3.1	Frequency Range	12-18GHz																																																								
3.2	Max. VSWR	2.0:1 max.																																																								
3.3	Power	1~50W available 1W CW (as shown)																																																								
3.4	Insertion Loss	4.0dB typ. 5.0dB max.																																																								
3.5	Step	1.0dB																																																								
3.6	Switching speed	100ns typ. (1W unit)																																																								
3.7	IM <sub>3</sub> /P1dB	63dBc / +20dBm																																																								
3.7	TTL Control (Balance)	<table border="1"> <thead> <tr> <th>C6</th> <th>C5</th> <th>C4</th> <th>C3</th> <th>C2</th> <th>C1</th> <th>Attenuation</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>IL</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>1.0dB</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>2.0dB</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>4.0dB</td> </tr> <tr> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>8.0dB</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>16.0dB</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>32.0dB</td> </tr> </tbody> </table>	C6	C5	C4	C3	C2	C1	Attenuation	0	0	0	0	0	0	IL	0	0	0	0	0	1	1.0dB	0	0	0	0	1	0	2.0dB	0	0	0	1	0	0	4.0dB	0	0	1	0	0	0	8.0dB	0	1	0	0	0	0	16.0dB	1	0	0	0	0	0	32.0dB
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0	1	0	0	0	0	16.0dB																																																				
1	0	0	0	0	0	32.0dB																																																				
3.8	DC Control	+5V(400mA) +15V(200mA)																																																								
3.9	DB9PIN	1-+12V 2--12V 3-1dB 4-2dB 5-4dB 6-8dB 7-16dB 8-32dB 9-GND																																																								





# RF-LAMBDA

The power beyond expectations

RFDAT1218G6A/R

Absorptive / Reflective Coaxial Digital Step Attenuator 12-18GHz

