

# MALI-007212-000000

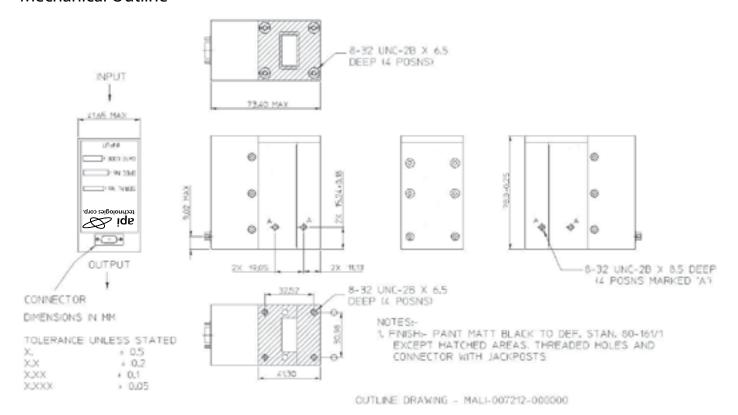
X-Band Waveguide Limiter with STC Blanking and Noise Source



- High Reliability
- Sensitivity Time Control (STC)
- Blanking feature
- Integrated Noise Source

- · High power handling
- Low insertion loss
- European Manufacture

#### Mechanical Outline



### RF Performance information

Parameter		Value			
		Min.	Тур.	Max.	Units
Frequency Band		9.0		9.6	GHz
Insertion Loss			0.5	1.0	dB
Normal Operating	Peak Power			500	W
	Mean power			15	W
	Pulse width			40	μs
	Duty cycle	25:1			Ratio
Input / Output Return Loss (Input power <= -10 dBm)			<1.29:1	1.38:1	Ratio
Fault condition, Peak power(40µs Pulse Max., 25:1 duty cycle min.)				5000	W
Fault Duration				10	ms
Flat Leakage				50	mW
Spike Leakage (RF rise time >= 15ns)			<250	500	mW
Recovery time, Normal Operating (to within 3dB of Insertion Loss)			650-750	1000	ns
Blanking Isolation		60			dB
STC Control (Input impedance approx. $3k\Omega$ )		0		5	V
STC Response (monotonic)		0		45	dB
Supply current, +15V Rail			30	100	mA
Supply current, -15V Rail			45	100	mA
Noise Source Supply (-15 ±1V applied Pin 3, 9 Way MDM)			13	17	mA
Noise Source ENR (Blanking Active)				12 ± 1.5	dB

(Applies over the frquency range, output and input characteristic impedance of stated waveguide. Unless otherwise stated limits & conditions are indicated values.)

## Pin-out 9 Way MDM Plug

Pin	Function		
1	+15V Supply		
2	Blanking		
3	Noise Source		
5	-15V Supply		
6	+15V Return (GND)		
8	STC		
9	-15V Return (GND)		
4, 7	Not Used		

### **Blanking Input**

Single ened TTL

'0' = Insertion Loss

'1' = Blanking

Environmental				
Operating Temperature	-40°C to +85°C			
Storage Temperature	-55°C to +90°C			
RF Connections				
Input / Output	WG16			
Pressure window fitted to front flange, 1.5 bar (gauge) Max.				

#### **Noise Source**

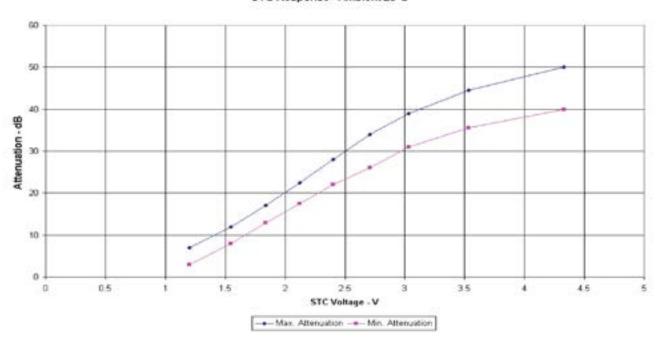
Apply bias to 9 way MDM. Pin 3

Noise Source OFF: 0V Bias, Pin 3

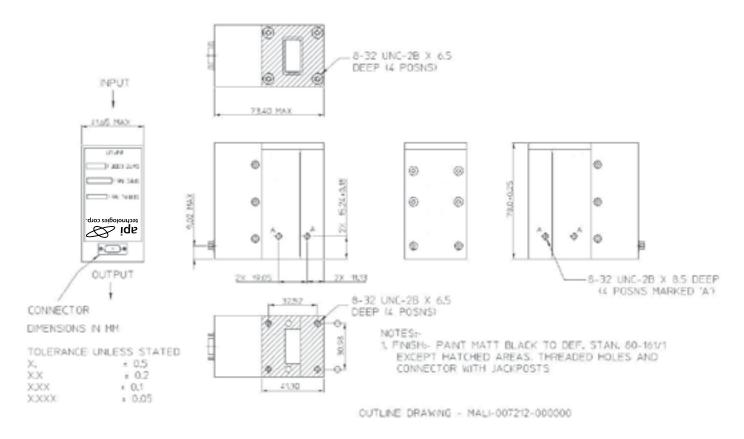
Noise Source ON : -15V  $\pm$  1V Bias, Pin 3

### **STC** Response

#### STC Response - Ambient 25°C



#### Mechanical Outline



Whilst every effort is made to ensure the accuracy of the information contained in this brochure, no responsibility can be accepted for any errors and/or omissions. Descriptions and specifications of products are subject to change without notice.

