

# MALIML0028

X-Band Waveguide Limiter with STC and Blanking



- High Reliability
- High power handling
- Low insertion loss
- Sensitivity Time Control (STC)
- Blanking feature
- European Manufacture.

#### Description

This X Band waveguide limiter provides excellent protection from unwanted signals. It features STC and Blanking capabilities for additional system flexibility.

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### **RF Performance**

Parameter		Value			Units
		Min.	typ.	Max.	
Frequency Band		9.2		9.6	GHz
Insertion Loss (Input power <= -10 dBm)			0.5	1.0	dB
Input / Output Return Loss (Input power <= -10 dBm)			<1.29:1	1.38:1	Ratio
Normal Operating	Peak Power			500	W
	Mean Power			35	W
	Pulse width			20	μs
	Duty cycle	25:1			Ratio
Fault condition peak power (6.2 μs Pulse Max. 20:1 duty cycle min.)				8	kW
Fault Duration				10	ms
Flat Leakage			<10	45	mW
Spike Leakage (RF rise time >= 15ns)				450	mW
Recovery time, Normal Operating (To within 3dB of Insertion Loss)			650 to 750	1000	ns
Recovery time (To within 3dB of Insertion Loss)				3	μs
Blanking Isolation		60			dB
STC Control (Input impedance approx. 3kΩ)		0		5	V
STC Response (monotonic)		0		45	dB
Supply current, +15V Rail			30	100	mA
Supply Current, -15V Rail			45	100	mA

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

#### Pin-out - 9 Way MDM Plug

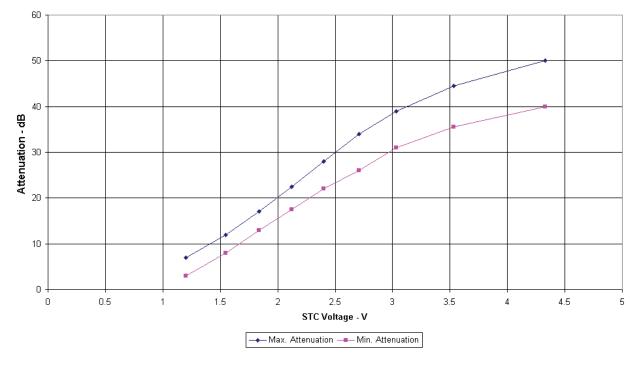
Pin	Function		
1	+15V Supply		
2	Blanking		
5	-15V Supply		
6	+15V Return (GND)		
8	STC		
9	-15V Return (GND)		
3, 4, 7	Not Used		

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.				

#### **Blanking Input**

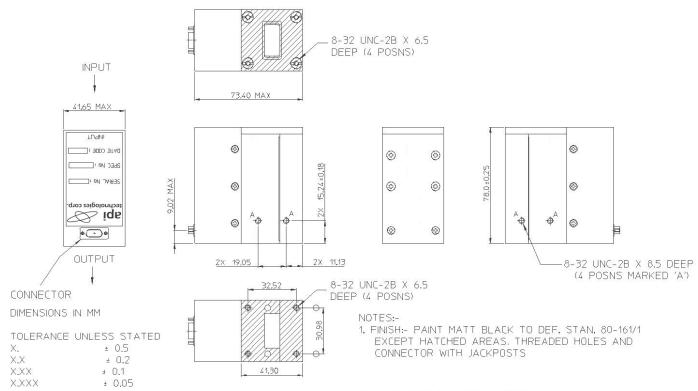
Single ended TTL '0' = Insertion Loss '1' = Blanking

#### **STC Response**



#### STC Response - Ambient 25°C

#### **Mechanical Outline**



OUTLINE DRAWING - MALIML0028

For further information please contact:

**RF2M Microwave Ltd** Featherstone Road Wolverton Mill Milton Keynes, MK12 5EW England

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+44 (0) 1908.574.200 info.rf2m@apitech.com http://rf2m.apitech.com