

MALIML0028

X-Band Waveguide Limiter with STC and Blanking

COBHAM

2010 Data Sheet v1

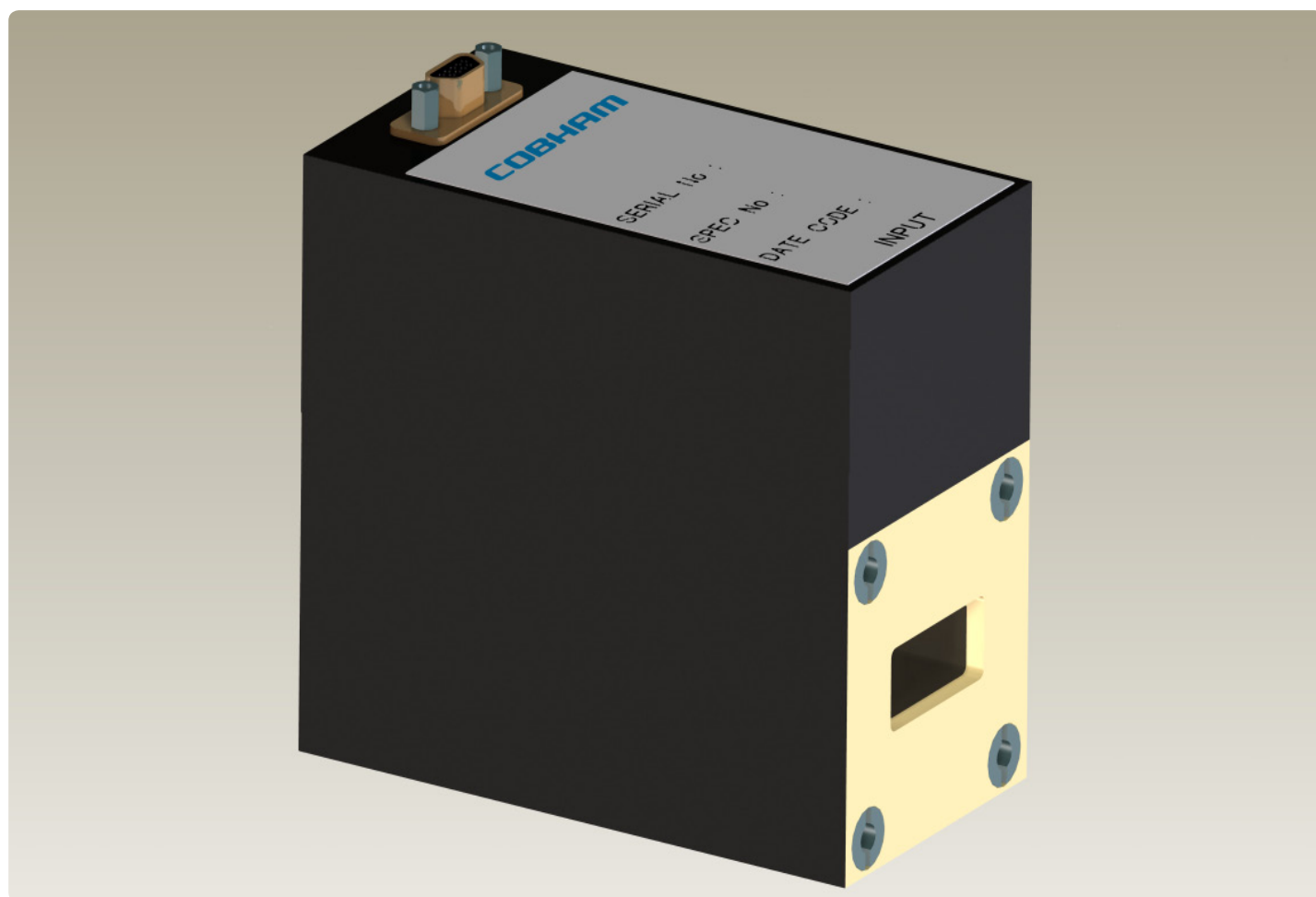
The most important thing we build is trust

Description

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

Features

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



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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

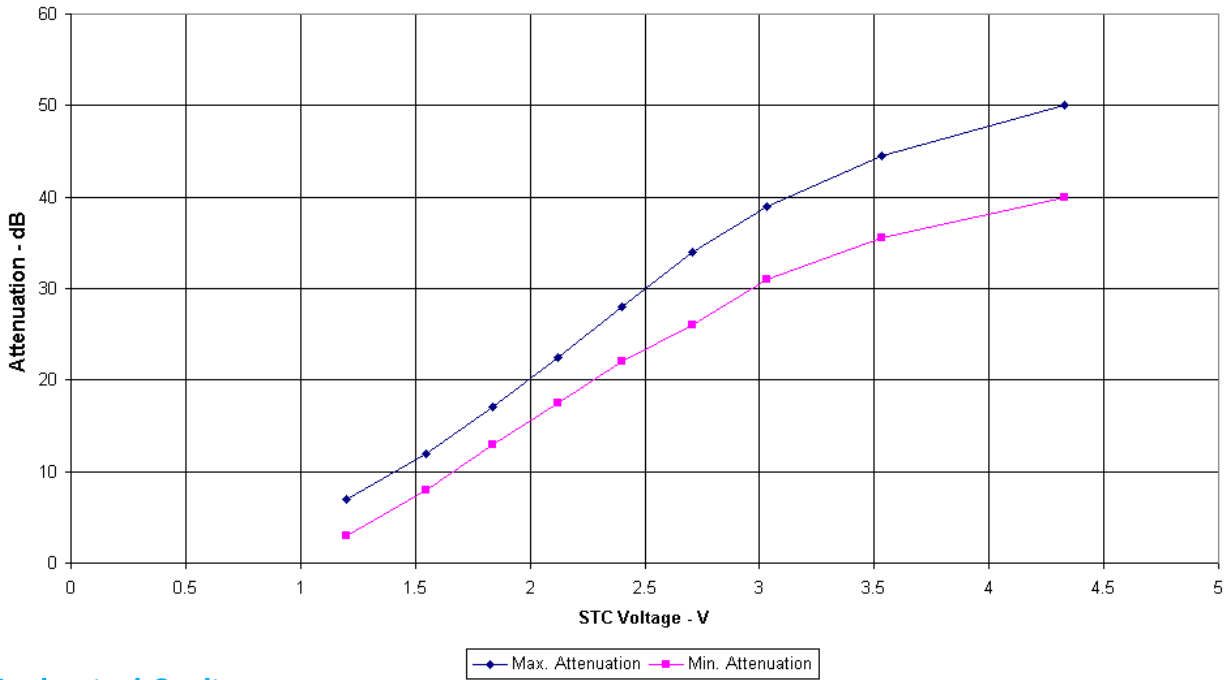
Single ended TTL

'0' = Insertion Loss

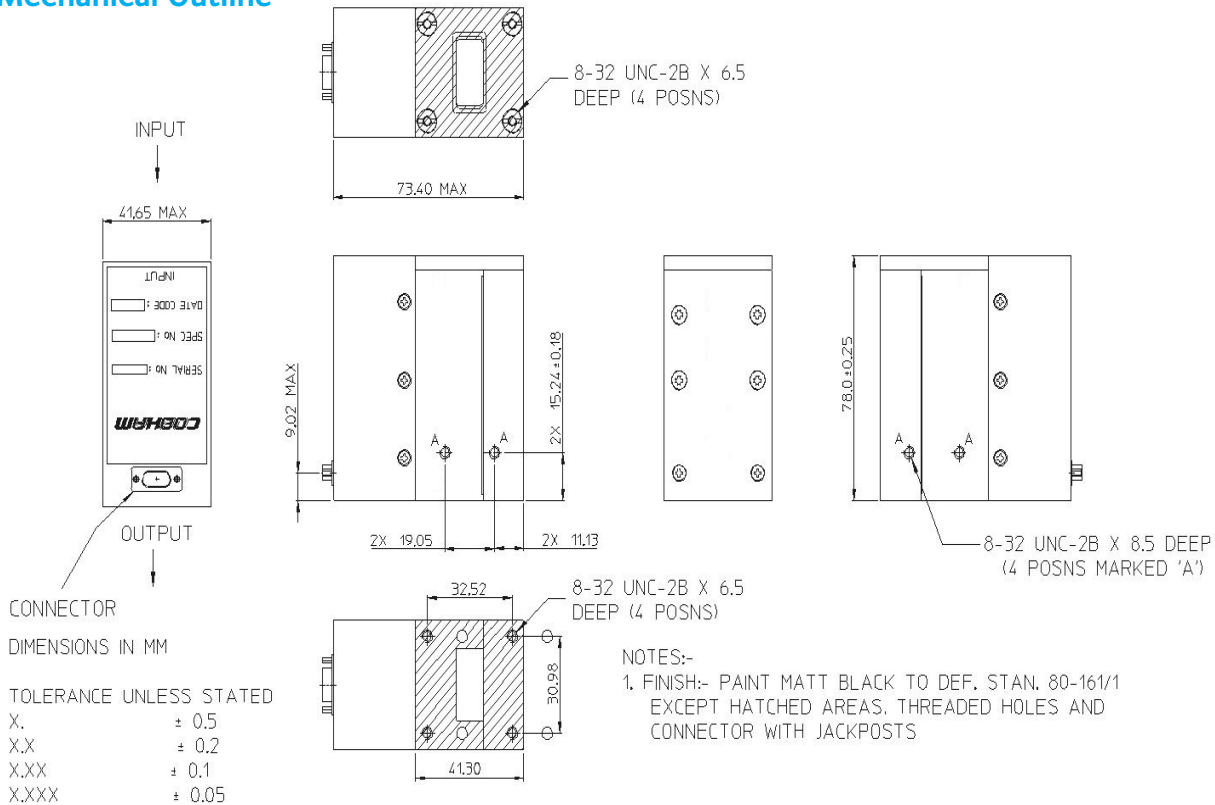
'1' = Blanking

STC Response

STC Response - Ambient 25°C



Mechanical Outline





For further information please contact:

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