

WRD350 Waveguide Isolator 4 - 8GHz

Features

- High power handling capability up to 10KW
- Wide band operation
- · High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- High peak to average handling capability
- All specifications can be modified upon request



Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

Electrical Specifications, $T_A=25$ °C

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Parameter	Min	Тур	Max	Units
Frequency Range	4 - 8 GHz			
Insertion Loss			0.50	dB
Isolation (Note 1)	17			dB
VSWR			1.30	:1
Forward Pulse Power	10kW, 10% Duty Cycle, 100us Pulse Width			
Reverse Power	2kW, 10%, 100us (10k must be less 5 seconds before shut down)			
Air Cooling	Temperature delta must be < 10C AC Axial Cooling Fan (Type AC 8300 H)			
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Finishing	Conductive Oxide (not painted)			
Flange Type	wrd350-C2			
Case Material	Aluminum Alloy			
Weight				ounces
Impedance		50		Ω

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss Bandwidth (5 \sim 10) % x Center Frequency (Isolation >23dB)

Bandwidth (20~30) % x Center Frequency (Isolation >21dB) Bandwidth (40~60) % x Center Frequency (Isolation >20dB)

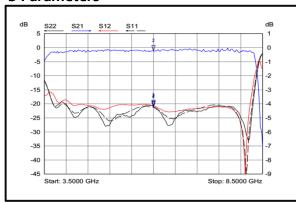
Ask manufacturer for detail



Environmental Specifications

Operational Temperature (°C)	-20 ~ +50	
Storage Temperature (°C)	-45 ~ +85	
	30,000 ft. (Epoxy Sealed Controlled environment)	
Altitude	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)	
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis	
Humidity	100% RH at 35c, 95%RH at 40 deg c	
Shock	20G for 11msec half sine wave, 3 axis both directions	

S-Parameters



MKr	Trace	X-Axis(GHz)	Value(dB)
1 🎖	S22	6.0000	-21.02
2 🎖	S21	6.0000	-0.24
3 ▽	S12	6.0000	-20.66
4 ▽	S11	6.0000	-21.24

ACmaxx axial fans

Nominal data (Type AC 8300H)

Parameter	Min	Тур	Max	Units
Frequency	50/60			Hz
Air flow		80		m³/h
		47		cfm
Nominal voltage	115/230			VAC
Voltage range	85		265	VAC
Sound pressure level		48		dB (A)
Sound power level		6.2		Bel (A)
Bearing	Ball bearings			
Power consumption		8.3		Watts
Nominal speed		5000		rpm⁻¹
Service life L ₁₀ (40°C)	55000			Hours
Service life L ₁₀ (T _{max})	20000		Hours	
Life expectancy L _{10IPC} (40℃)	92500		Hours	
Direction of air flow	Exhaust over struts			
Direction of rotation	Clockwise, looking towards rotor			
Material	Housing: GRP ¹⁾ (PBTP) Impeller: GRP ¹⁾ (PA)			
Connection line	Via single wires AWG 22,TR 64			
Weight	11.46		ounces	
Dimensions	80x80x32		mm	
Operational Temp.	-20		+75	℃
Option	Open loop speed control, speed and alarm signal; improved moisture protection orprotection class IP 54			

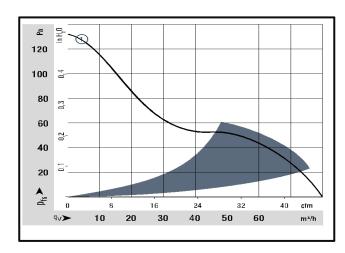


Notes:

Air performance measured according to: ISO 5801. Installation category A, without contact protection. Noise: Total sound power level LWA ISO 103002 measured on a hemisphere with a radius of 2 m. Sound pressure level LpA measured at 1 m distance from fan axis.

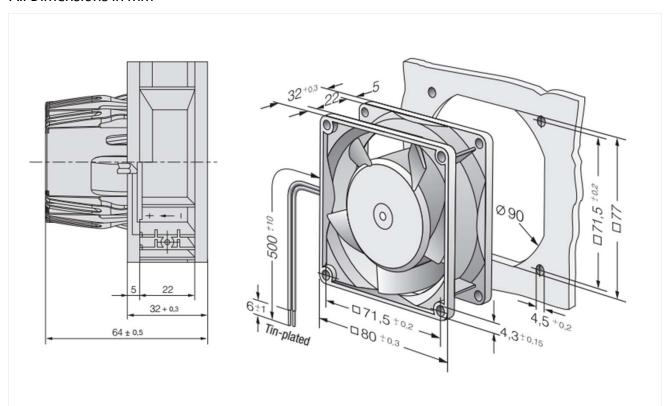
The values given are applicable only under the specified measuring conditions and may differ depending on the installation conditions.

In the event of deviation from the standard configuration, the parameters must be checked after installation! For detailed information see



Outline Drawing:

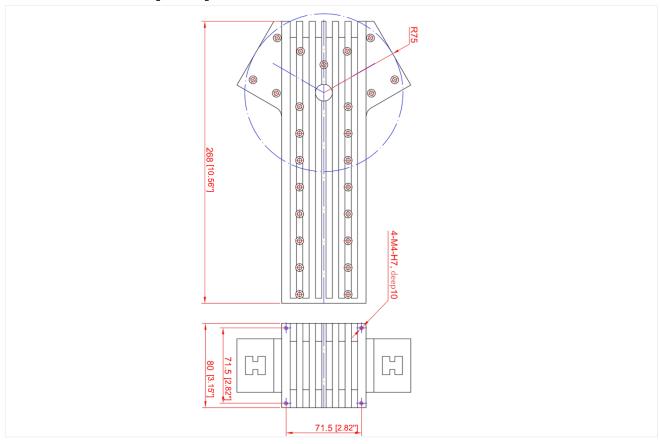
All Dimensions in mm





Outline Drawing:

All Dimensions in mm [inches]



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