

# Waveguide WRD650 Double Ridge Dual Directional Coupler 6 - 18GHz

#### **Features**

- Compact Package
- Excellent phase and amplitude balance
- Bi-Directional as divider and combiner
- Low Insertion loss and high isolation
- Standard: MIL E-5400, MIL E -16400
- High power handling capability
- \* 3W/2W maximum input when work as combiner.



#### **Typical Applications**

- Aerospace and military applications
- LMDS multi-carrier operation

## Electrical Specifications, $T_A=25\,^{\circ}\!\!C$

Parameters	Min.	Тур.	Max.	Units
Frequency Range	6		18	GHz
Coupling Forward		40		dB
Directivity	18			dB
Insertion Loss			0.3	dB
VSWR Primary			1.2	:1
VSWR Secondary			1.2	:1
Average Power	200 W			w
Waveguide Type	Rectangular WRD650			
Flange Type	CPRG, CPRF, COVER, CHOKE available			
Flange Holes	Through			
Material	Alloyed Cuprum			
Internal Body Finish	Plated chromate or conversion			
External Body Finish	Body painted with gray / black epoxy enamel			

**RF-LAMBDA USA** 

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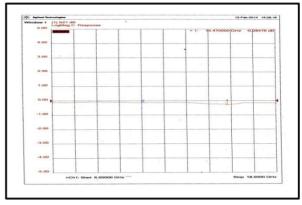


## **Environmental Specifications**

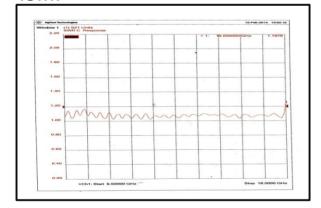
Operational Temperature (°C)	-45 to +85	
Storage Temperature (°C)	-55 to +125	
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)	
	60,000 ft. 1.0psi min (Hermetically Sealed Un- controlled environment) (Optional)	
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis	
Humidity	100% RH at 35c, 95%RH at 40 deg c	
Shock	20G for 11msec half sine wave, 3 axis both directions	

## **Typical Performance Plots**

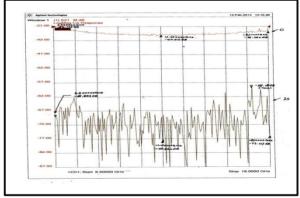
#### **Insertion Loss**



### **VSWR**



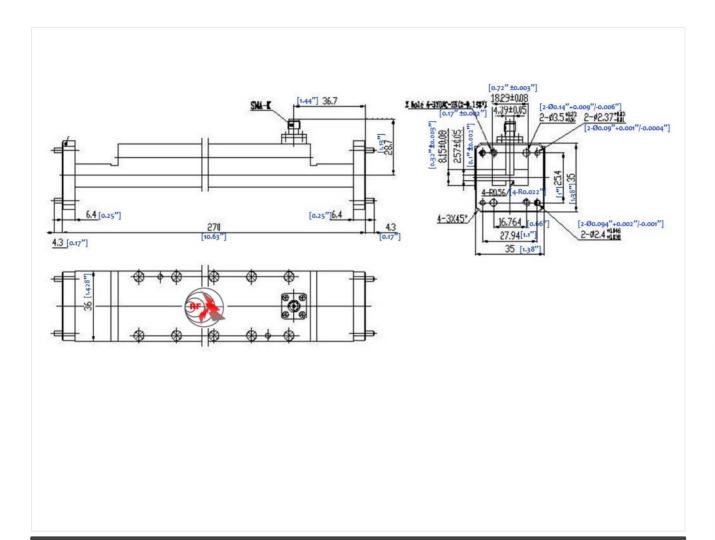
# **Coupling and Isolation**





# **Outline Drawing:**

All Dimensions in mm [inches]



#### **Important Notice**

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