

## SWY-91397340-10-I5

W Band Diplexer, 90 to 92 GHz and 96 to 98 GHz,  
40 dB Rejection

**SWY-91397340-10-I5** is a W band waveguide diplexer with a low passband frequency of 90 to 92 GHz and a high passband of 96 to 98 GHz. The nominal insertion loss of the diplexer is 1.0 dB and the minimum rejection is 40 dB. Since both low and high passband frequencies can be changed by modifying the design, custom designs are available under different model numbers.



## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
<b>Low Passband</b>			
Passband Frequency	90 GHz		92 GHz
Passband Insertion Loss		1.0 dB	
Passband Return Loss		16 dB	
Group Delay Variation		1.5 ns	
Rejection Frequency	96 GHz		98 GHz
Rejection, Low Side	40 dB		
<b>High Passband</b>			
Passband Frequency	96 GHz		98 GHz
Passband Insertion Loss		1.0 dB	
Passband Return Loss		16 dB	
Group Delay Variation		1.5 ns	
Rejection Frequency	90 GHz		92 GHz
Rejection, Low Side	40 dB		
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

## Mechanical Specifications:

Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Compatible Flanges
Material	Aluminum
Finish	Silver Plated
Dimensions	2.83" (L) x 0.75" (W) x 0.39" (H)
Outline	WY-IW-SX1

## ECCN

EAR99

## FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

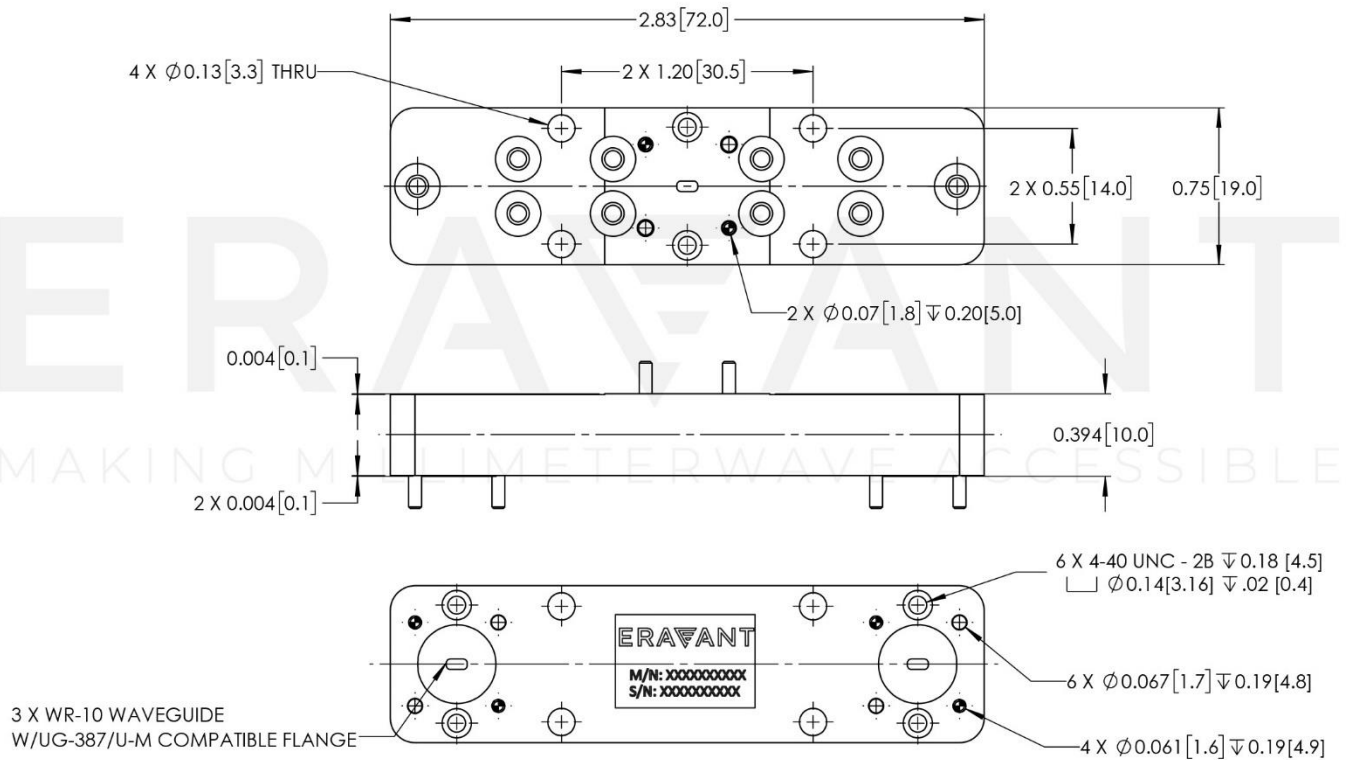
## APPLICATIONS

- Communication Systems
- Sub-assemblies

## SUPPLEMENTAL DETAILS



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



### NOTE:

- All data presented is collected from a sample lot. Actual data may vary from unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

### CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.