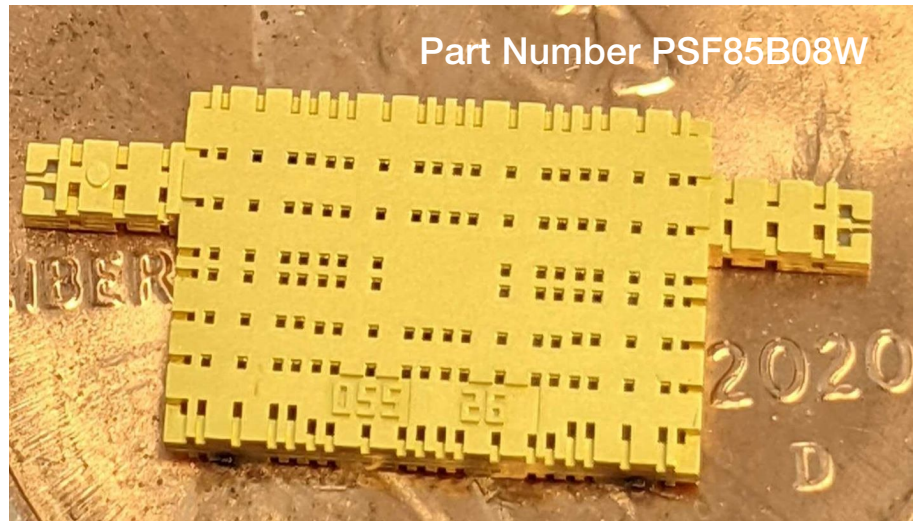


## Features and Benefits

- **Compact Size and Weight**
- **Near Ideal Performance**  
-Sharp band edges provide maximum useable passband with very low loss
- **Precision**  
-Low part-to-part variation
- **Ease of Assembly**  
-Standard chip and wire processes

## Applications

- mmWave Networks
- RF Telemetry
- Instrumentation



# Bandpass Filter 81-89 GHz

**Millimeter wave bandpass filter. Low loss and small, surface mount form factor.**

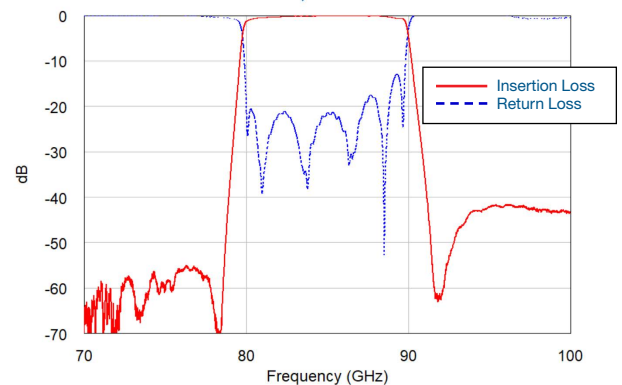
### Description

Nuvotronics PolyStrata<sup>®</sup> Technology provides high performance in a small form factor. Low loss and steep filter shape provide maximum useable passband for millimeter wave networks. The part is designed for wire bond inputs and outputs and has a low profile.

This part has a passband of 81 GHz – 89 GHz with a characteristic impedance of 50  $\Omega$ . The steep filtering skirts allow for optimal utilization of frequency operation. This part is compliant with RoHS standards. Tape and reel packaging is available for bulk orders.

## Typical Electrical Performance

Parameter	Frequency Range (GHz)	Min	Typical	Max
Insertion Loss (dB)	81–89	—	0.75	3.6
Return Loss (dB)	< 78	12	15	—
Rejection (dB)	> 92	35	40	—
	> 92	35	40	—



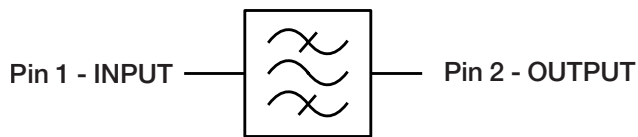
### Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Moisture Sensitivity	MSL1
Ordering Information	PSF85B08W
Standard Packaging	PSF85B08WWP (Waffle Pack)
Alternative Packaging Available	Tape and Reel Conforms to EIA-481 latest revision
Component Termination Finish	Immersion Silver, Immersion Gold
Export Classification	5A991.h

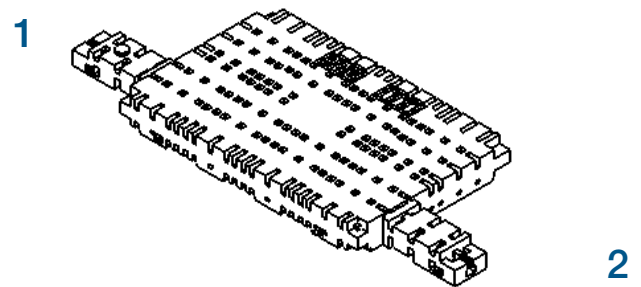
### Absolute Maximum Ratings

Power	2W CW
Operating Temp	-55°C to 125°C
Solder Reflow	260°C max. for 10 seconds, 3 cycles
Epoxy Attach	150°C max. for 90 minutes

### Simplified Block Diagram



### Component View



### Assembly Diagram

Drawings available upon request

### Mechanical Drawing

