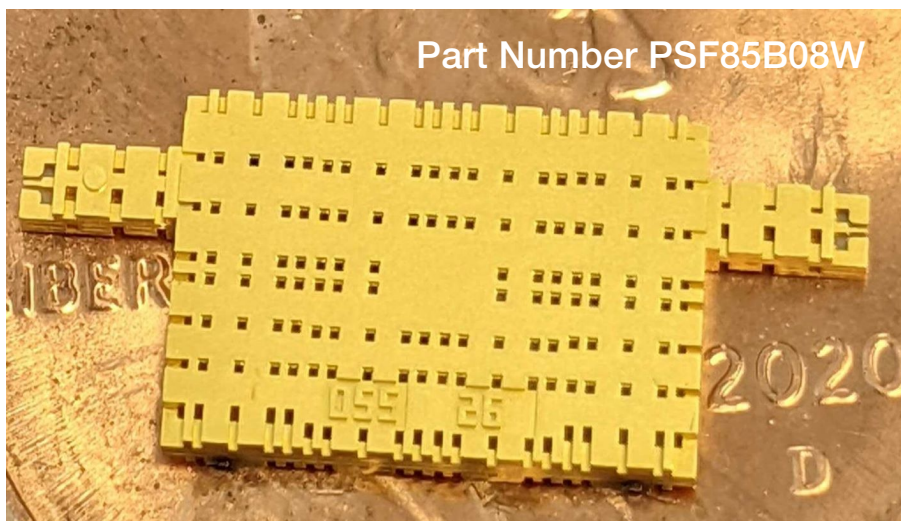


Features and Benefits

- **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.

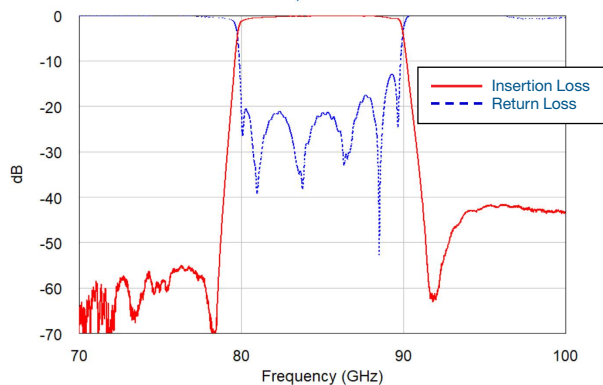
Description

Nuvotronics PolyStrata® 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 Ω . 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	—



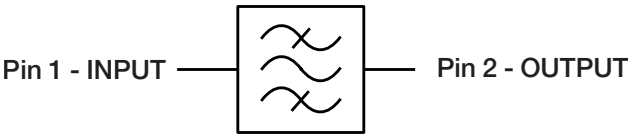
Additional Details

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

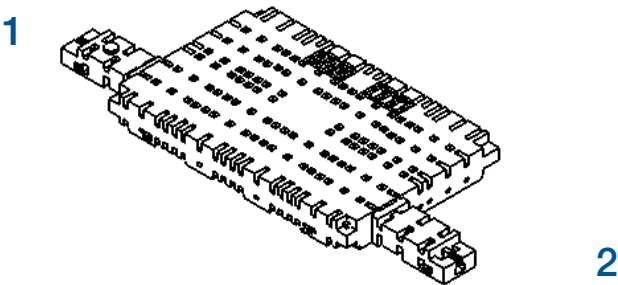
Absolute Maximum Ratings

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



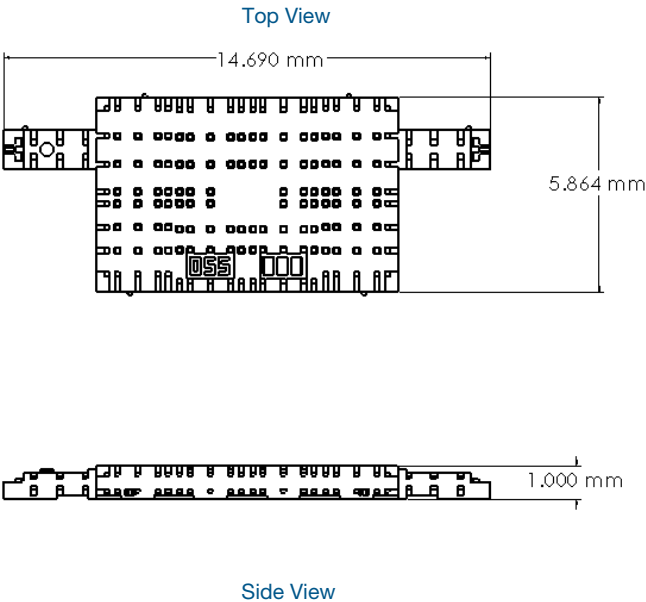
Component View



PCB Layout

Drawings available upon request

Mechanical Drawing



Legend: TOP METAL  SOLDER MASK  PART OUTLINE 