

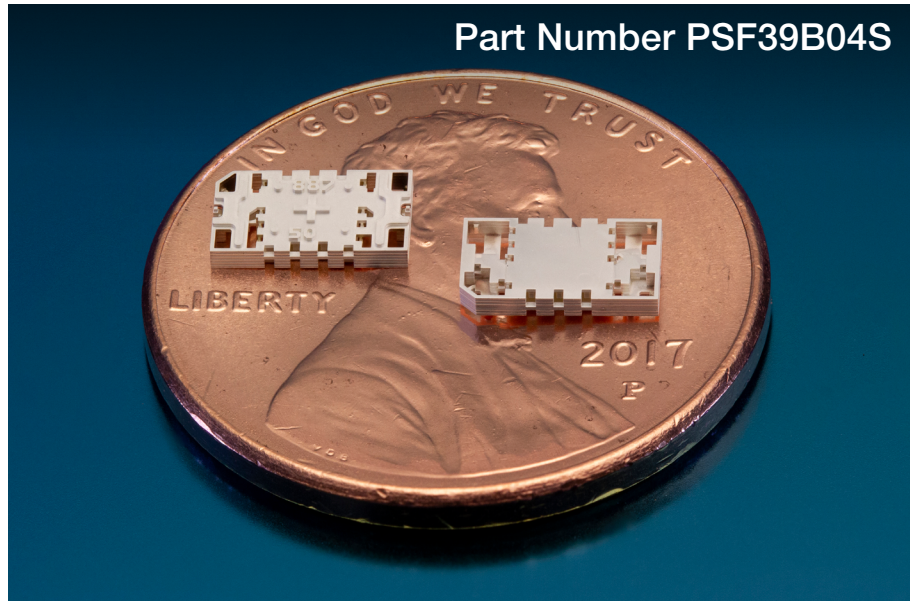


### Features and Benefits

- **Compact Size and Weight**
- **Near Ideal Performance**  
-Higher rejection and flatter passbands
- **Precision**  
-Low part-to-part variation
- **Ease of Assembly**  
-Standard SMT processes
- **Lower System BOM Cost**  
-Eliminate extra gain stages and signal cleanup

### Applications

- **Metrology**
- **RF Telemetry**
- **Meterology**
- **Instrumentation**
- **5G Backhaul**
- **Satellite Communications**



## Ka Band Bandpass Filter

**Surface mount millimeter-wave bandpass filter with unrivaled rejection, and flatness – in a miniature form factor.**

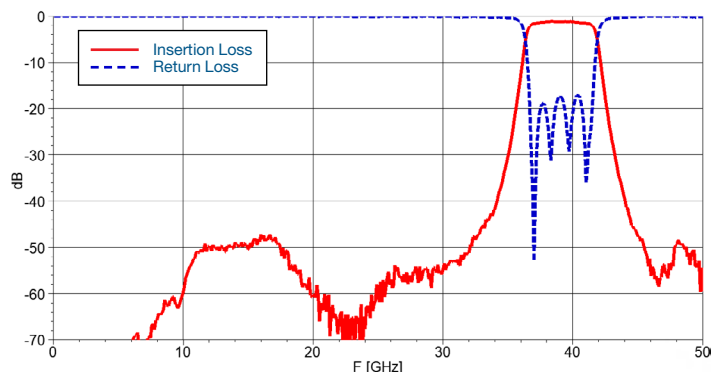
### Description

Nuvotronics PolyStrata® Technology delivers performance and precision for your front-end systems. This bandpass filter is a surface-mount interdigital filter with unparalleled flatness and high frequency performance.

This PSF39B04S part has a passband of 37 GHz – 41 GHz with a characteristic impedance of 50 Ω. The high power, low loss performance of this part is ideal for space or ground applications. This part is compliant with RoHS standards. Tape and reel packaging is available for bulk orders.

### Typical Electrical Performance

Parameter	Value
Insertion Loss, 37 GHz to 41 GHz	< 2.2 dB
Return Loss, 37 GHz to 41 GHz	> 12 dB
Rejection at 33 GHz	> 30 dB
Rejection at 45 GHz	> 30 dB



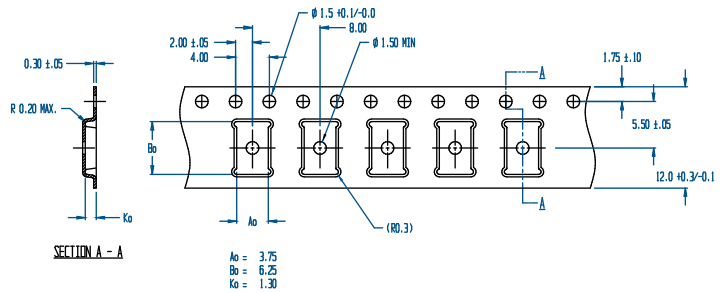
### Absolute Maximum Ratings

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

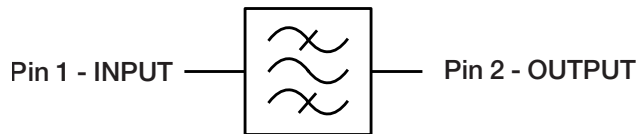
### Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Moisture Sensitivity	MSL1
Ordering Information	PSF39B04STR (Tape and Reel)
Standard Packaging	Tape and Reel Conforms to EIA-481-E
Component Termination Finish	Immersion Silver
Certifications	RoHS Compliant
Export Classification	EAR99

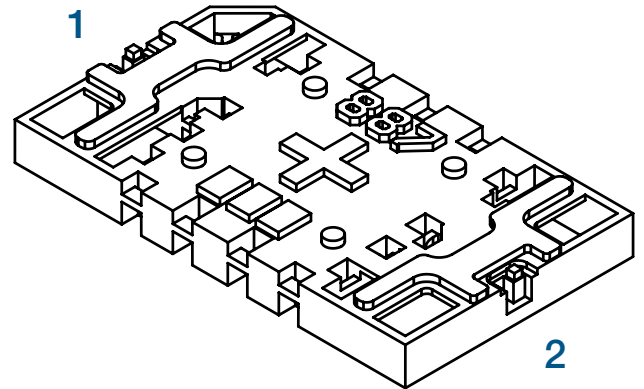
### Tape and Reel



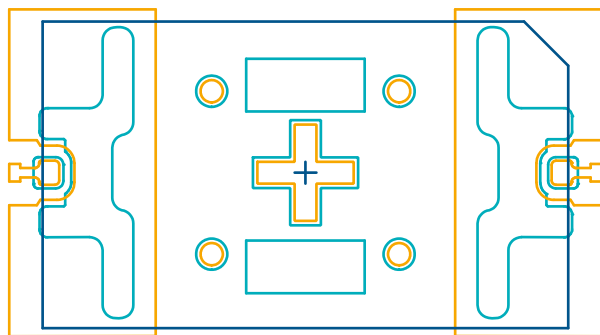
### Simplified Block Diagram



### Component View



### PCB Layout



Legend: TOP METAL ■ SOLDER MASK ■ PART OUTLINE ■

Drawings available upon request

### Mechanical Drawing

