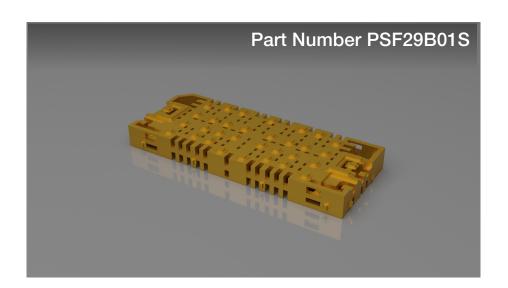




#### **Features and Benefits**

- Small size and self-shielded -Weight: 0.2g
- Flat passband with low loss
- Rejection of LO and image frequencies
- Repeatable performance
  - Low part-to-part variation
- · Ease of assembly
  - Standard SMT processes



# **Applications**

- Satellite Communications
- Upconverters
- Downconverters

# 28 - 29 GHz Bandpass Filter

# High Q surface mount filter for satellite up and down converters.

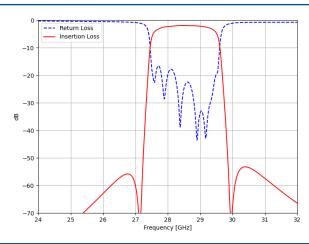
#### **Description**

Nuvotronics PolyStrata® Technology provides high performance filtering in a small form factor (10.14mm x 4.0mm x 1.1mm). The PSF29B01S surface-mount filter provides low insertion loss, a flat passband, and high rejection. Typical rejection is 55 dB at 950 MHz below the pass band. This part is ideal for satellite up and down converter applications. The filter is compliant with standard SMT assembly processes. Tape and reel packaging is available for bulk orders.

# Typical Electrical Performance\*

Parameter	Frequency Range (GHz)	Min	Тур	Max
Passband Insertion Loss (dB)	28 - 29	-	2.5	3
Passband Return Loss (dB)		12	15	-
Rejection (dB)	DC - 27.05	50	55	-

<sup>\*</sup>The specifications above are valid at ambient temperature. Insertion loss performance over -40°C to 85°C may vary by +/- 0.2 dB.





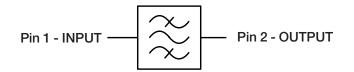
#### **Additional Details**

Special Handling / Storage Instructions		
Storage	IAW IPC-4553A	
ESD Sensitivity	None	
Ordering Information	PSF29B01S	
Standard Packaging	Tape and Reel	
Alternative Packaging Available	Waffle Pack	
<b>Component Termination Finish</b>	Immersion Gold	
Export Certifications	5A991.a	

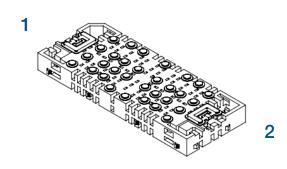
#### **Absolute Maximum Ratings**

Power	TBD	
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	

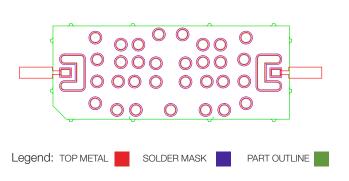
# Simplified Block Diagram



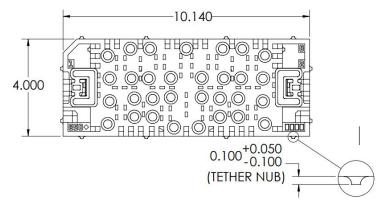
## Component View



# **PCB** Layout



# Mechanical Drawing



### Drawings available upon request

