



#### **Features and Benefits**

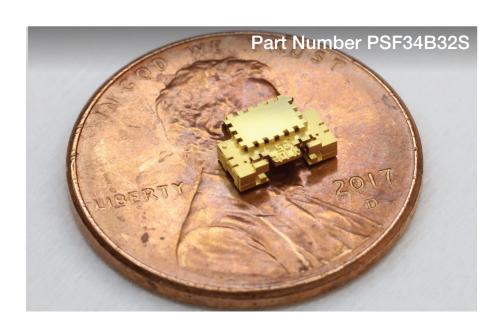
- Small Size and Lightweight
- Near Ideal Performance

   Low insertion loss and good rejection
- Precision
  -Low part-to-part variation
- Ease of Assembly

   Standard SMT Processes
- Self-shielded

### **Applications**

- EW
- Radar
- SIGINT



# 18-50 GHz Bandpass Filter

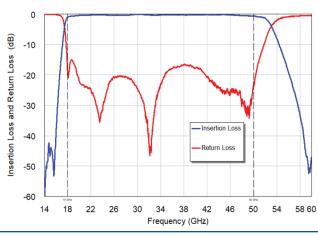
# Surface mount wideband filter in a minature form factor.

#### **Description**

Nuvotronics PolyStrata® Technology provides high performance filtering in a small form factor (5.8mm x 4.1mm x 1.60mm). The PSF34B32S surface-mount interdigital filter provides low insertion loss and high rejection. Typical insertion loss performance is < 0.4 dB across the 18 - 50 GHz band. This part is ideal for space or ground applications. This wideband 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
Insertion Loss (dB)	18 - 50	-	0.3	1.2
Return Loss (dB)	16-50	13	20	-
Rejection (dB)	DC - 15	40	45	-
	58 - 60	30	34	-





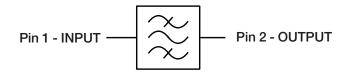
#### **Additional Details**

Special Handling / Storage Instructions		
Storage	IAW IPC-4553A	
EDS Sensitivity	None	
Ordering Information	PSF34B32S	
Standard Packaging	Waffle Pack	
Alternative Packaging Available	Tape and Reel	
<b>Component Termination Finish</b>	Immersion Silver, Immersion Gold	
<b>Export Certifications</b>	TBA	

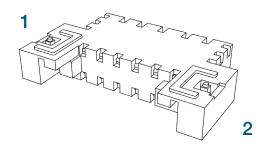
## **Absolute Maximum Ratings**

Power	Minimum 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

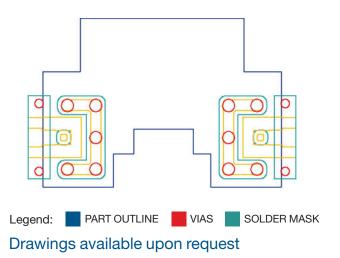
## Simplified Block Diagram



## Component View



## **PCB** Layout



# Mechanical Drawing

