CUBIC Mission Solutions

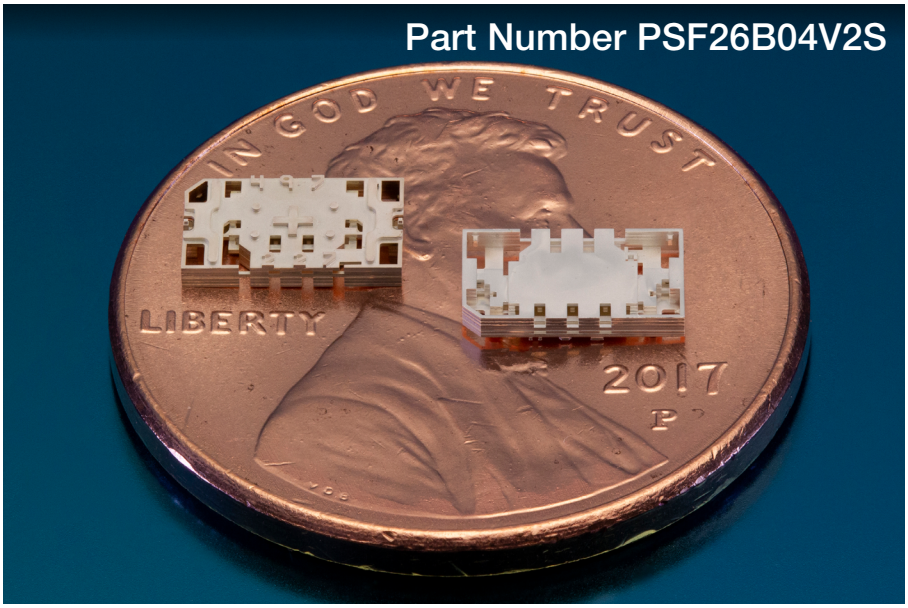
NUVOTRONICS

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**



K Band Bandpass Filter

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

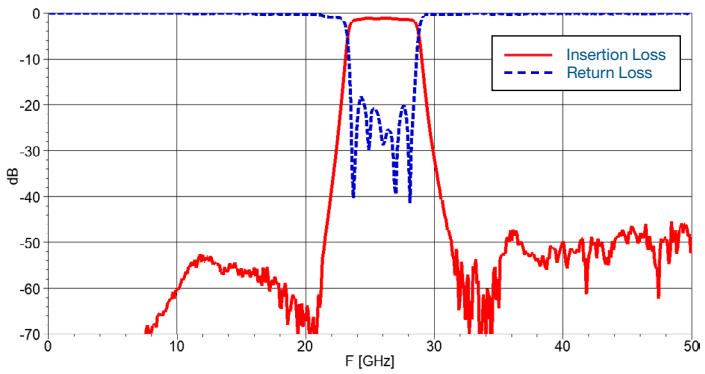
Description

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 PSF26B04V2S part has a passband of 24 GHz – 28 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, 24 GHz to 28 GHz	1.3 dB
Return Loss, 24 GHz to 28 GHz	20 dB
Rejection at 20 GHz	65 dB
Rejection at 32 GHz	60 dB



Part Name PSF26B04V2S

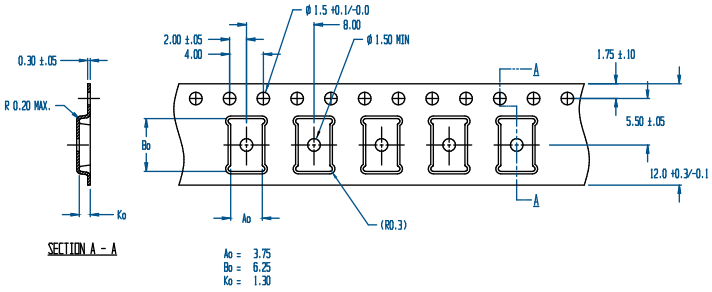
Absolute Maximum Ratings

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

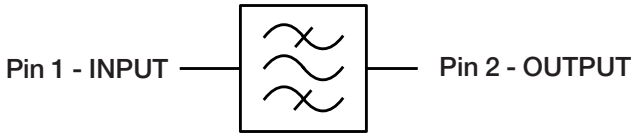
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Moisture Sensitivity	MSL1
Ordering Information	PSF26B04V2S (Tape and Reel)
Standard Packaging	Tape and Reel Conforms to EIA-481-E
Component Termination Finish	Immersion Silver
Certifications	RoHS Compliant
Export Classification	EAR99

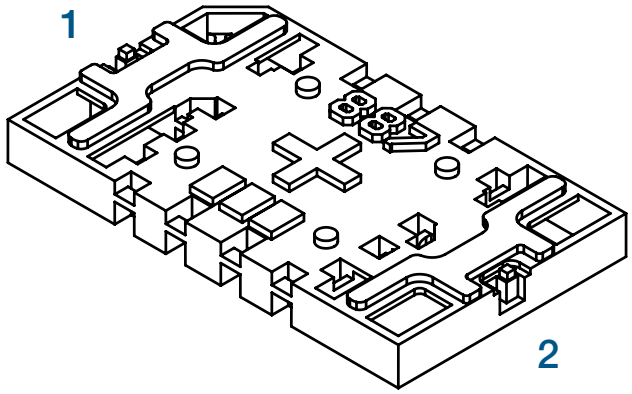
Tape and Reel



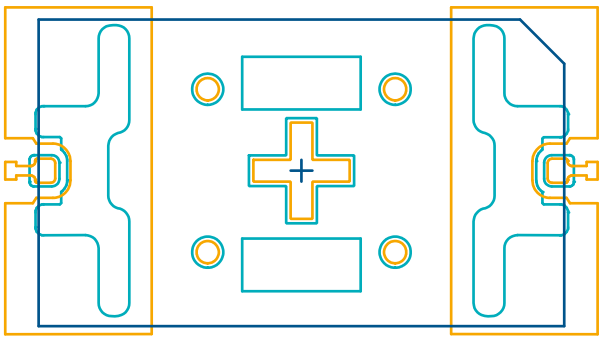
Simplified Block Diagram



Component View



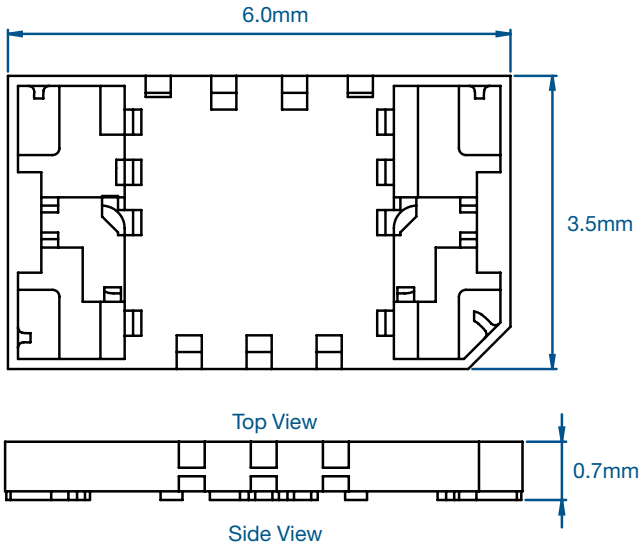
PCB Layout



Legend: TOP METAL SOLDER MASK PART OUTLINE

Drawings available upon request

Mechanical Drawing



Cubic Mission Solutions
cubic.com/Nuvotronics

2305 Presidential Drive
Durham, NC 27703