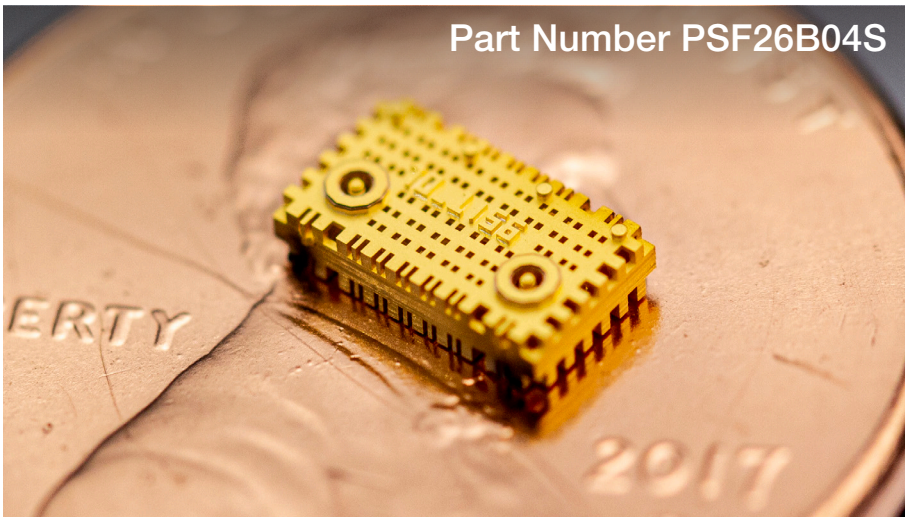
CUBIC Mission Solutions

NUVOTRONICS

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 SMT processes



Bandpass Filter 24.5 - 28.3 GHz

Applications

- **mmWave Networks**
- **RF Telemetry**
- **Instrumentation**

Millimeter wave bandpass filter. Low loss and small, surface mount form factor.

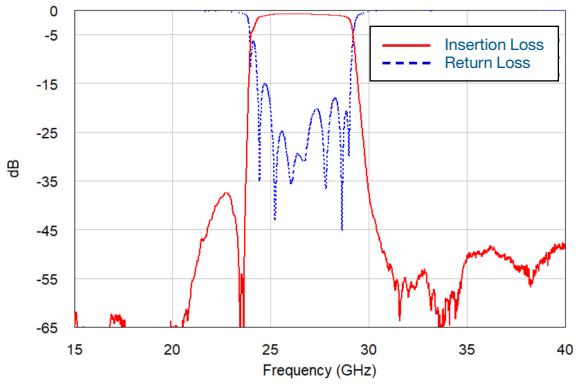
Description

Nuvotronics PolyStrata® Technology provides high performance in a small form factor. Low loss and steep filter shape provide maximum useable passband for mmwave networks. The low profile and surface mountability enable manufacturability for compact phased array architectures.

his PSF26B04S part has a passband of 24.5 GHz – 28.3 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)	24.5—28.3	—	1.2	1.5
Return Loss (dB)		14	17	—
Rejection (dB)	DC—20.5	52	54	—
	20.5—23.5	35	38	—
	34—48	43	45	—



Part Name PSF26B04S

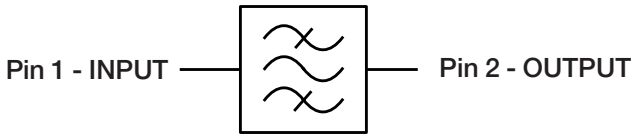
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Moisture Sensitivity	MSL1
Ordering Information	PSF26B04S
Standard Packaging	PSF26B04SWP (Waffle Pack)
Alternative Packaging Available	Tape and Reel Conforms to EIA-481 lastest revision
Component Termination Finish	Immersion Silver, Immersion Gold
Certifications	RoHS Compliant
Export Classification	5A991

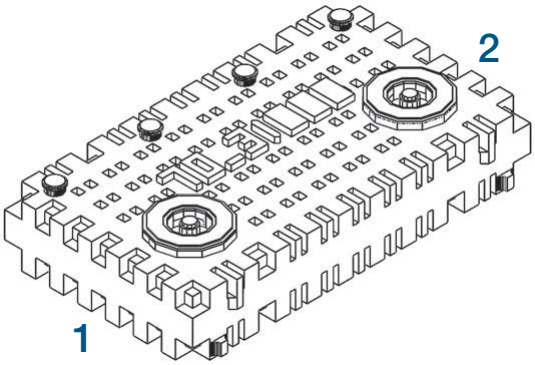
Absolute Maximum Ratings

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

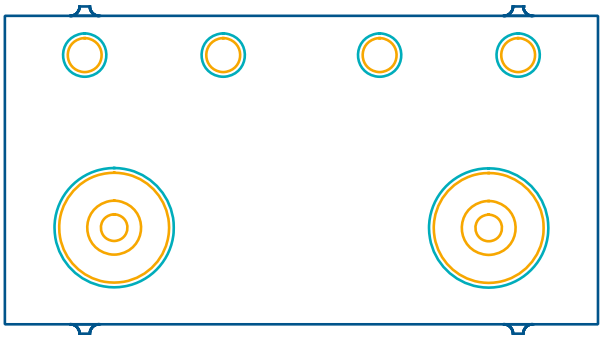
Simplified Block Diagram



Component View



PCB Layout



Legend: TOP METAL SOLDER MASK PART OUTLINE

Drawings available upon request

Mechanical Drawing