CUBIC Mission Solutions

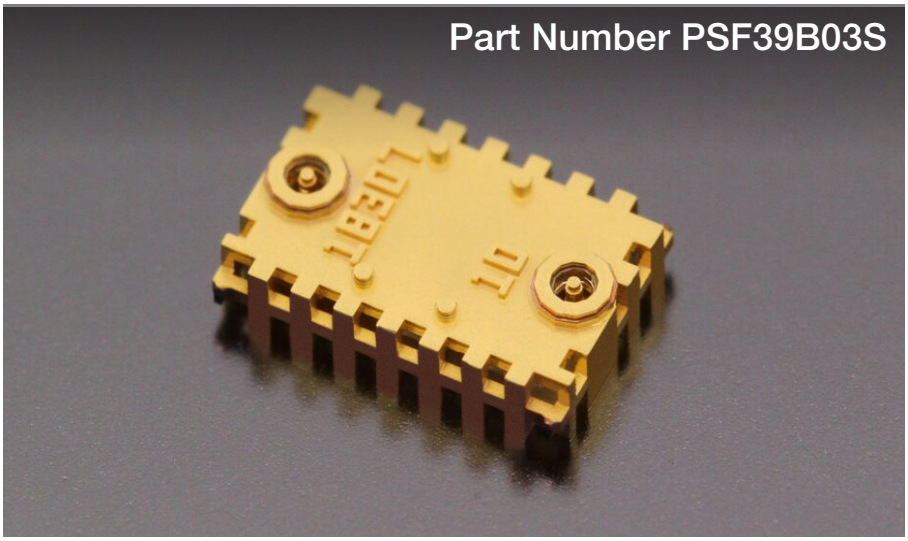
NUVOTRONICS

Features and Benefits

- **Compact Size and Weight**
  -Use in 5G MIMO arrays
- **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

Applications

- **5G Band n260 Access Network**
- **RF Telemetry**
- **Instrumentation**



5G Band n260 Filter - Low Loss

Millimeter wave 5G filter for band n260. Low loss and small, surface mount form factor.

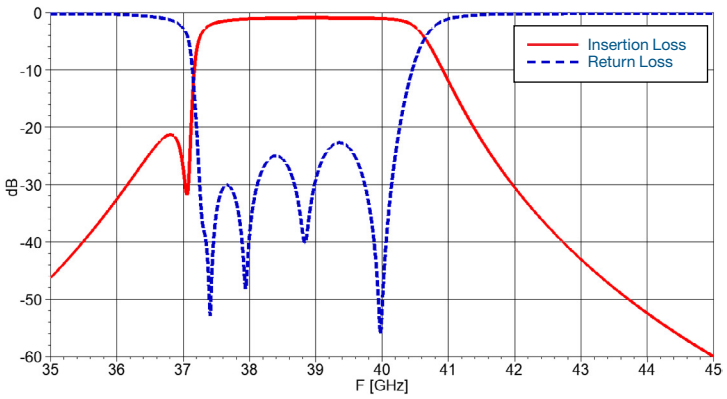
Description

Nuvotronics PolyStrata® Technology provides high performance in a small form factor. Low loss and steep filter shape provide maximum useable passband for 5G access networks. The low profile and surface mountability enable manufacturability for compact phased array architectures.

This PSF26B04S part has a passband of 37.5 GHz – 40 GHz with a characteristic impedance of 50 Ω for operation in the n260 band. 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	Value
Insertion Loss, 37.5 GHz to 40 GHz	< 2 dB
Return Loss, 37.5 GHz to 40 GHz	>15 dB
Rejection at 0 to 37 GHz	> 20 dB
Rejection at 41 to 50 GHz	> 10 dB
Rejection at 51 to 65 GHz	> 20 dB



Part Name PSF39B03S

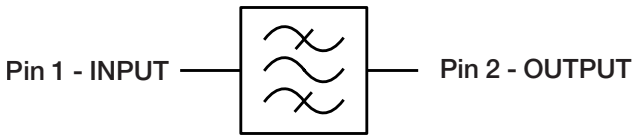
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
EDS Sensitivity	None
Moisture Sensitivity	MSL3
Ordering Information	PSF39B03S
Standard Packaging	Tape and Reel Conforms to EIA-481 lastest revision
Alternative Packaging Available	Gel-coated Substrate Carrier Waffle pack
Component Termination Finish	Immersion Silver Immersion Gold

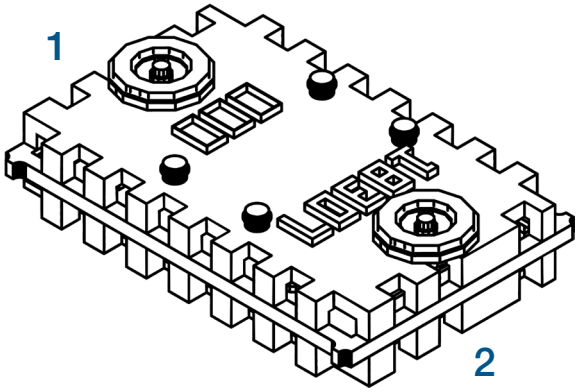
Absolute Maximum Ratings

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

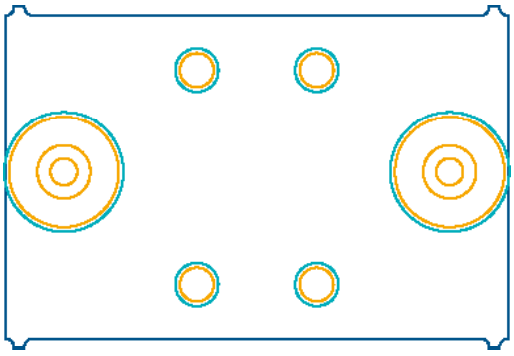
Simplified Block Diagram



Component View



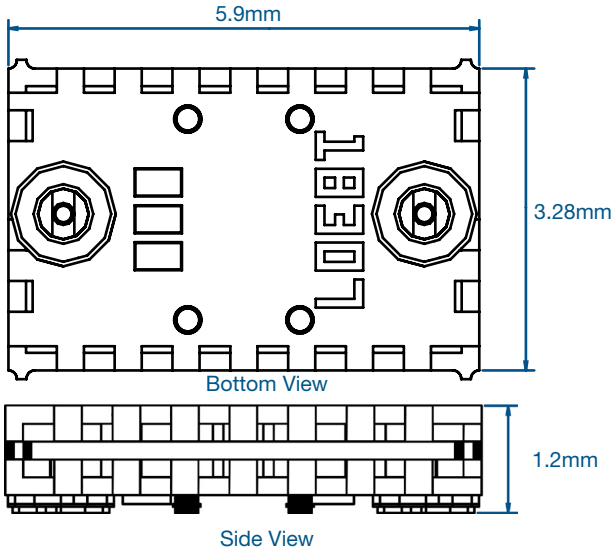
PCB Layout



Legend: TOP METAL SOLDER MASK PART OUTLINE

Drawings available upon request

Mechanical Drawing



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