

Features and Benefits

- **Small Size and Lightweight**
-Weight: 0.19g
- **Near Ideal Performance**
-Low insertion loss and high rejection
- **Precision**
-Low part-to-part variation
- **Ease of Assembly**
-Standard SMT processes

Applications

- **Satellite Communications**
- **Defense**
- **Test & Measurement**
- **Telecom**



40 GHz Lowpass Filter

Ka-Band, Surface-Mount Filter in a miniature size.

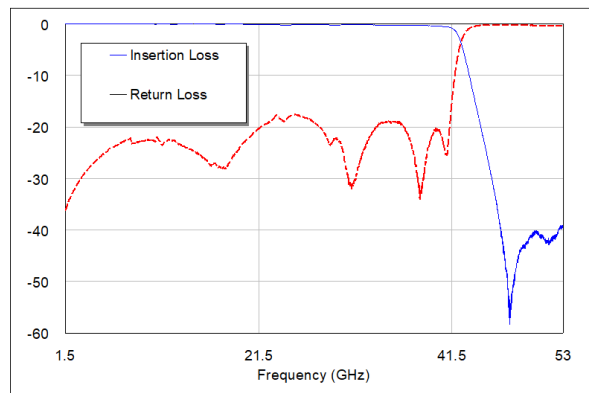
Description

Nuovotronics PolyStrata® Technology offers a high performance filter in a small form factor (7.8 x 3.3mm) with an insertion loss of <1.5dB below 40GHz and > 35dB rejection above 45GHz. This device is ideal for commercial satcom, defense and test & measurement for both Rx and Tx applications.

Typical Electrical Performance*

Parameter	Frequency Range (GHz)	Min	Typ	Max
Passband Insertion Loss (dB)	DC - 40	-	0.75	1
Passband Return Loss (dB)	DC - 40	15	18	-
Stopband (dB)	46.3 - 60	30	35	-

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



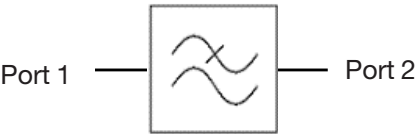
Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
ESD Sensitivity	None
Ordering Information	PSFL40S
Standard Packaging	Gel Pak
Alternative Packaging Available	Tape and Reel
Component Termination Finish	Immersion Gold

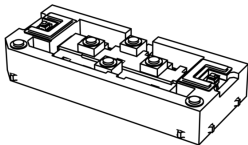
Absolute Maximum Ratings

Power	5W
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

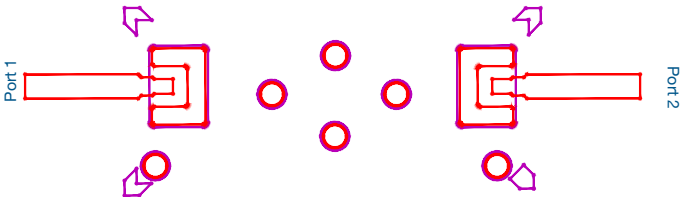
Simplified Block Diagram



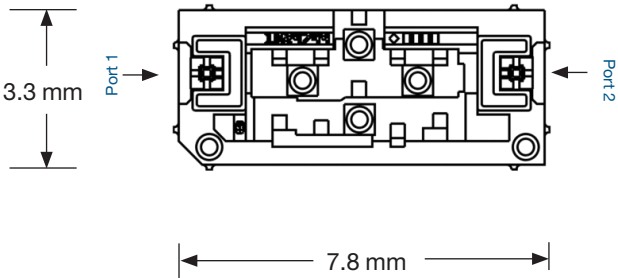
Component View



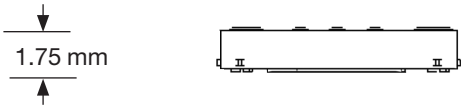
PCB Layout



Mechanical Drawing



Bottom



Front

Legend: TOP METAL  SOLDER MASK  PART OUTLINE 

Drawings available upon request