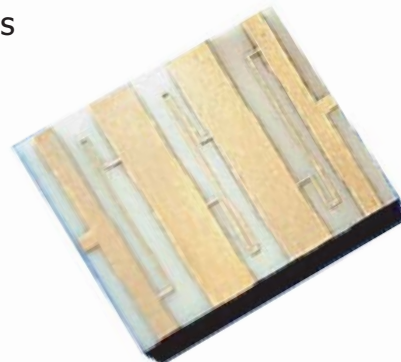


# IMS

## IMF Series Thick Film L-band Low Pass Filter

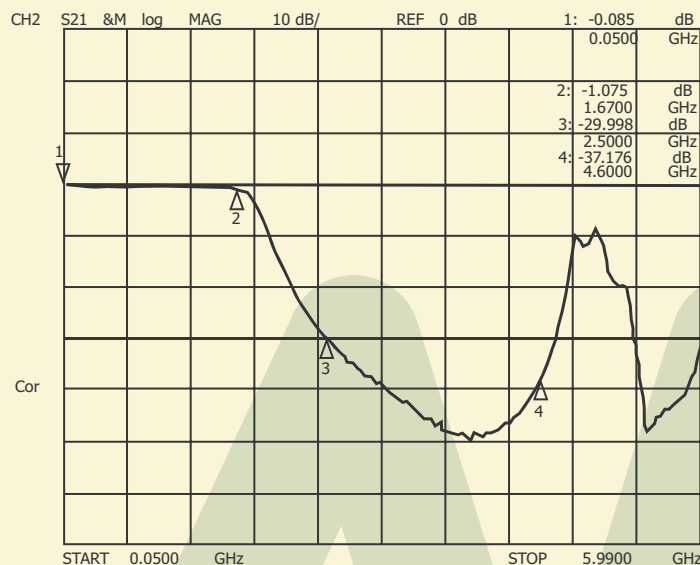
The **ims** IMF Series low pass filters (LPF) afford the customer the performance of a custom designed filter with the price and delivery closer to that of an off-the-shelf solution. Circuit construction is lumped/distributed element SMT microstrip on alumina, which enables higher performance than an equivalent off-the-shelf packaged device. Tooling costs are held to a minimum.



These filters are for engineers who need a robust and precision design. They have been successfully tested to input power levels exceeding 40W. Part-to-part performance repeatability is excellent in high or low volumes.

Included below is an example of a LPF that was designed for a specific customer application. This filter was matched to the client circuit for minimum insertion loss and optimum VSWR and rejection.

### IMF 2262 Frequency Response



The curve left illustrates the performance of the **IMF 2262** filter. Characteristics were determined by the filter requirements submitted by the customer.

The actual curve for other semicustom LPFs will vary and will be determined by customer requirements and will be furnished with the first article delivery. See reverse for Return Loss, Insertion Loss, and VSWR.

### IMF 2262 Electrical Specifications

Passband:	Up to 1.6 GHz
Rejection:	25 dB minimum maintained to 3rd harmonic
VSWR:	1.1:1
Insertion loss:	0.5 dB typical
Impedance:	50 ohm
Dimensions:	0.550" X 0.400" X 0.025"
Power:	20 - 40W depending on baseplate temp.
Substrate:	Alumina

**1.6GHz**  
Cutoff

**<0.5dB**  
Insertion Loss

**25dB**  
Rejection

**ims** International Manufacturing Services, Inc.

Tel (401) 683-9700  
Fax (401) 683-5571  
e-mail: [ims@ims-resistors.com](mailto:ims@ims-resistors.com)  
<http://www.ims-resistors.com>

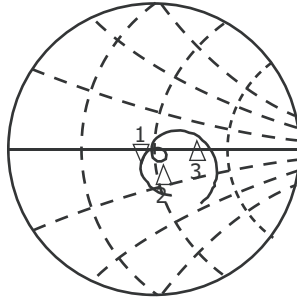
**impossible made simple**

Specifications Subject to Change Without Notice

# IMF 2262 VSWR

CH1 S<sub>11</sub> &M 500 mU FS 1: 44.898 Ω -3.9238 Ω 42.696 pF  
0.9500 GHz

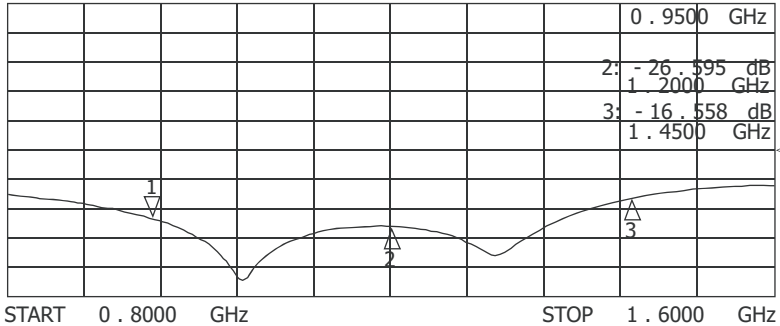
Cor



2: 52.111 Ω  
-4.2852 Ω  
1.2000 GHz  
3: 66.07 Ω  
6.3438 Ω  
1.4500 GHz

CH2 S<sub>11</sub> &M log MAG 10 dB / REF 0 dB 1: -23.382 dB

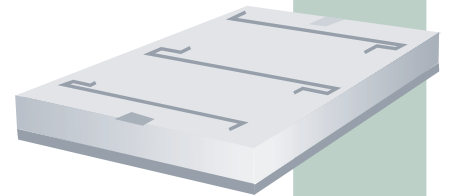
Cor



START 0.8000 GHz STOP 1.6000 GHz

VSWR and return loss for IMF 2262 example on front page.

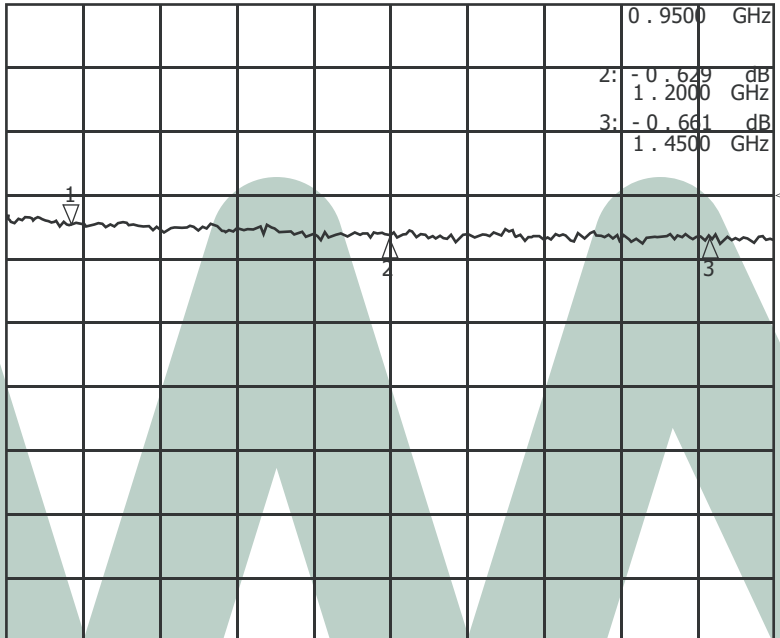
**Visit us on  
the Web-  
[http://  
www.ims-  
resistors.com](http://www.ims-resistors.com)**



# IMF 2262 Insertion Loss

CH2 S<sub>21</sub> &M log MAG 1 dB / REF 0 dB 1: -0.473 dB

Cor



START 0.9000 GHz STOP 1.5000 GHz

Insertion loss for IMF 2262 example on front page.

**Ask Us  
About  
Engineering  
Kits!**

# Ordering Information

Since the filter is of a semicustom nature, a part number will be assigned upon initiation of new filter project when requested. Contact the factory or your local IMS sales representative to find out how IMS can design a semicustom LPF for you.



Tel (401) 683-9700  
Fax (401) 683-5571  
e-mail: [ims@ims-resistors.com](mailto:ims@ims-resistors.com)  
<http://www.ims-resistors.com>