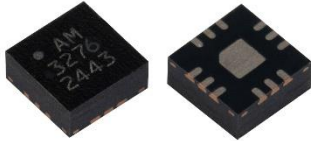


AM3276 –Filter

12 GHz Lowpass Filter

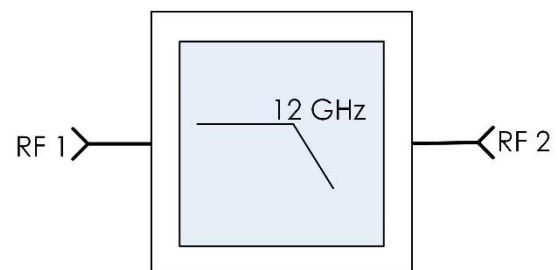


AM3276 is a compact, lowpass filter that provides low loss and high rejection in a small 3 mm QFN package. With a cutoff frequency of 12 GHz and sharp rejection skirt, the AM3276 is an excellent choice to filter unwanted signals in any RF system. The lowpass filter is matched to 50 ohms and operates from -40 C to +100 C.

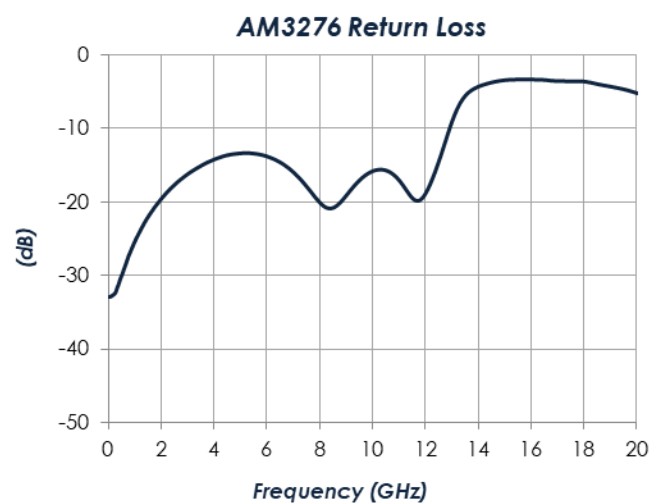
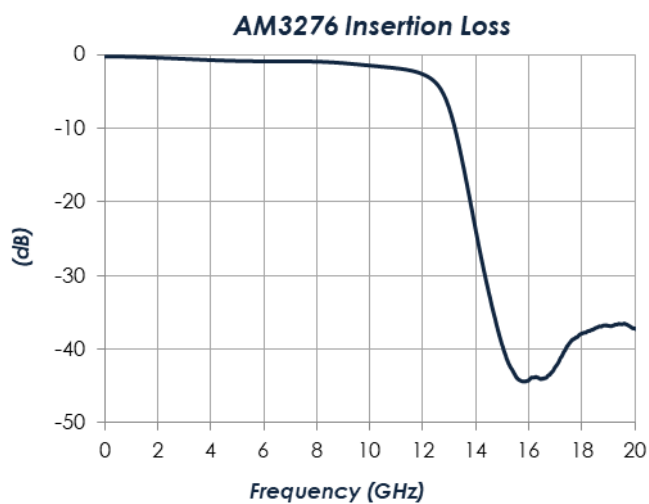
FEATURES

- 12 GHz Cutoff Frequency
- >38 dB Rejection in Stopband Typical
- <2 dB Loss in Passband Typical
- 3 mm QFN Package
- -40 C to +100 C Operation

FUNCTIONAL DIAGRAM



CHARACTERISTIC PERFORMANCE





CONTENTS

FEATURES 1

FUNCTIONAL DIAGRAM 1

CHARACTERISTIC PERFORMANCE 1

REVISION HISTORY..... 2

PIN LAYOUT AND DEFINITIONS 3

SPECIFICATIONS..... 4

TYPICAL PERFORMANCE 5

EVALUATION PC BOARD..... 6

PART ORDERING DETAILS 6

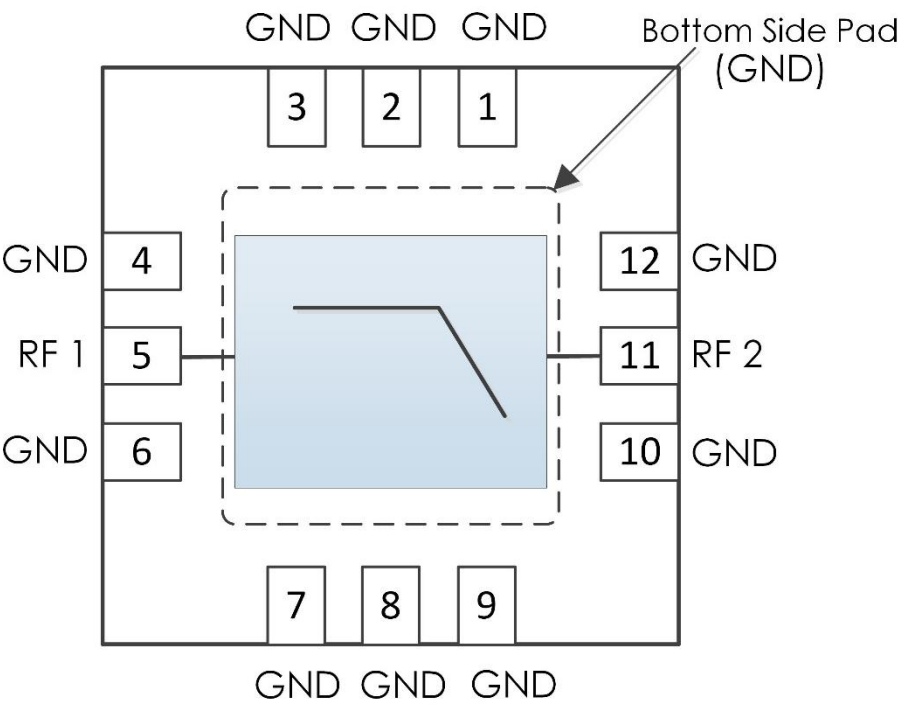
RELATED PARTS 6

COMPONENT COMPLIANCE INFORMATION 7

REVISION HISTORY

Date	Revision	Notes
April 20, 2026	1	Initial Release

PIN LAYOUT AND DEFINITIONS



Pin	Name	Function
1 - 4	GND	Ground - Common
5	RF 1	RF Port 1 - 50 ohms
6 - 10	GND	Ground - Common
11	RF 2	RF Port 2 - 50 ohms
12	GND	Ground - Common

SPECIFICATIONS

Absolute Maximum Ratings

	Minimum	Maximum
RF Input Power		+27 dBm
Storage Temperature Range	-55 C	+150 C

Note: Any device operation beyond the Absolute Maximum Ratings may result in permanent damage to the device. The values listed in this table are extremes and do not imply functional operation of the device at these or any other conditions beyond what is listed under Recommended Operating Conditions. Any part subjected to conditions outside of what is recommended for an extended amount of time may suffer from reliability concerns.

Handling Information

	Minimum	Maximum
Moisture Sensitivity Level	MSL 3	



Mercury products are electrostatic sensitive.
Follow safe handling practices to avoid damage.

Recommended Operating Conditions

	Minimum	Typical	Maximum
Operating Case Temperature	-40 C		+100 C

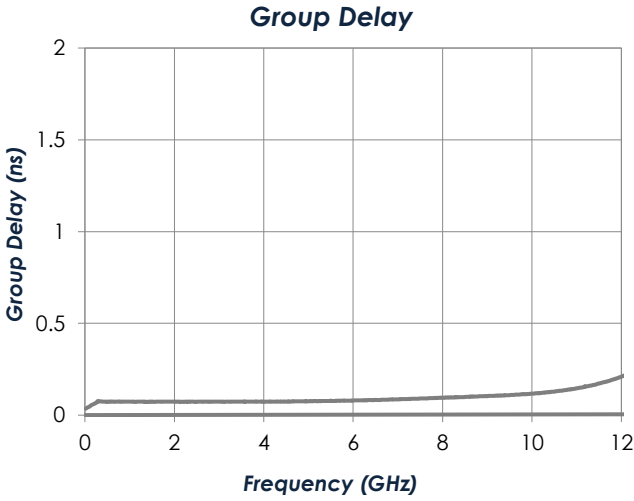
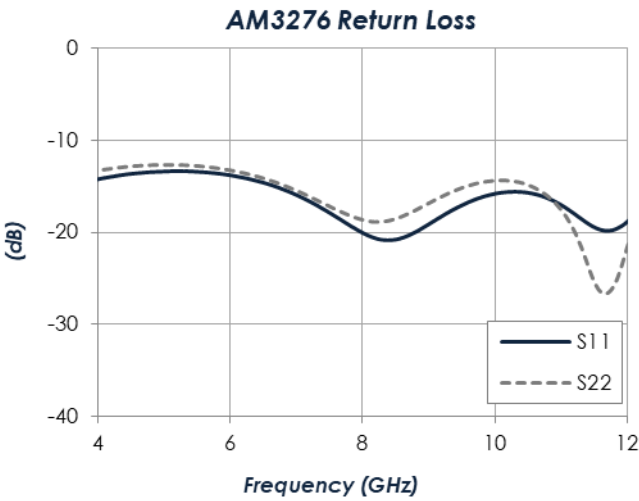
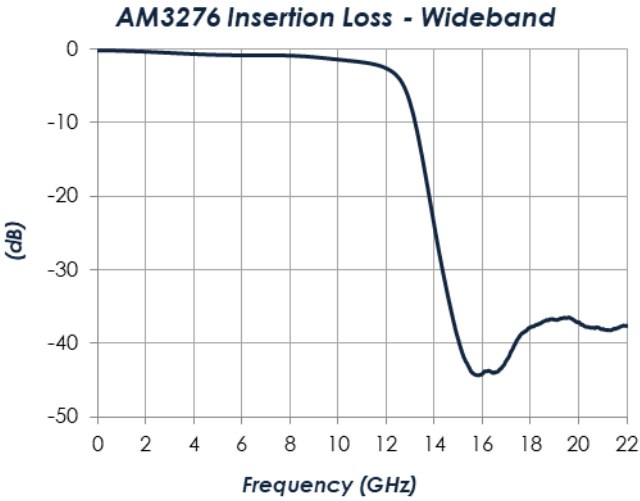
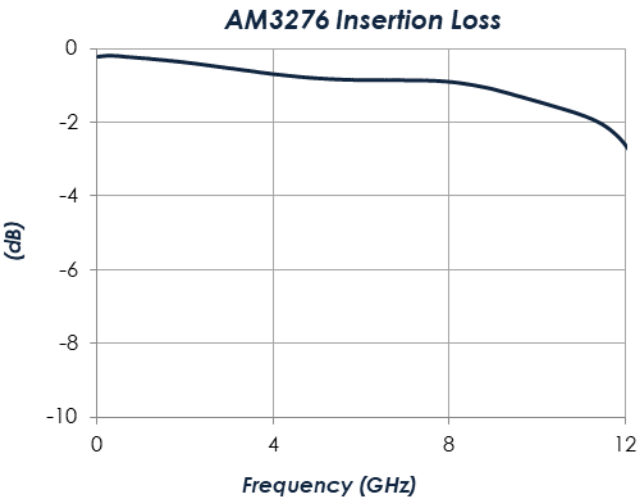
RF Performance

(T = 25 °C unless otherwise specified)

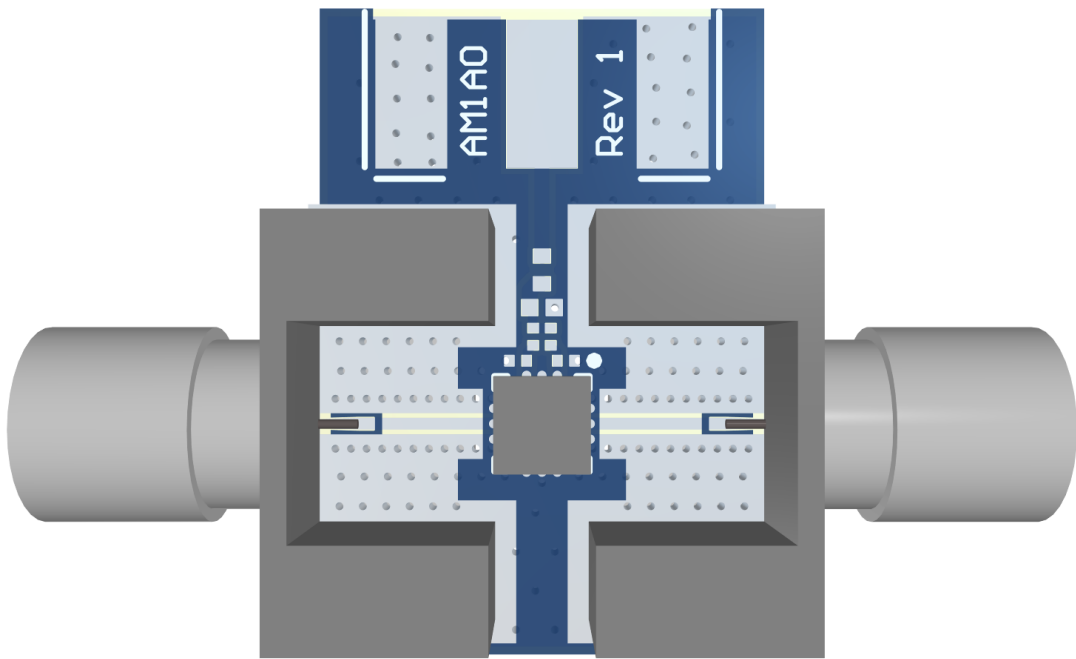
Param	Testing Conditions	Min	Typical	Max
Frequency Range		DC		12 GHz
Passband Flatness			2.5 dB	
Stopband Rejection	f > 15 GHz		39.9 dB	
Insertion Loss	f = 10 MHz		0.2 dB	
	f = 6 GHz		0.9 dB	
	f = 12 GHz		2.6 dB	
Return Loss	f = 10 MHz		32.9 dB	
	f = 6 GHz		13.8 dB	
	f = 12 GHz		18.8 dB	

TYPICAL PERFORMANCE

(T = 25 C unless otherwise specified. Refer to s-parameters available for download on the Mercury website for more information.)



EVALUATION PC BOARD



PART ORDERING DETAILS

Description	Part Number
3 mm x 3 mm x 1.2 mm QFN package	AM3276
AM3276 Evaluation Board with Connectors	AM3276-Eval

RELATED PARTS

Part Number		Description
AM3228	18 GHz	Lowpass Filter
AM3277	16 GHz	Lowpass Filter

COMPONENT COMPLIANCE INFORMATION

RoHS: Mercury Systems, Inc. hereby certifies that all products comply with the EC Directive 2011/65/EC on the Restriction of Hazardous Substances, commonly known as EU-RoHS 6 and 10. All products supplied by Mercury shall be compliant with the European Directive 2011/65/EC based on the following substance list.

Substance List	Allowable Maximum Concentration
Lead (Pb)	<1000 PPM (0.1% by weight)
Mercury (Hg)	<1000 PPM (0.1% by weight)
Cadmium (Cd)	<75 PPM (0.0075% by weight)
Hexavalent Chromium (CrVI)	<1000 PPM (0.1% by weight)
Polybrominated Biphenyls (PBB)	<1000 PPM (0.1% by weight)
Polybrominated Diphenyl ethers (PBDE)	<1000 PPM (0.1% by weight)
Decabromodiphenyl Deca BDE	<1000 PPM (0.1% by weight)
Bis (2-ethylhexyl) Phthalate (DEHP)	<1000 PPM (0.1% by weight)
Butyl Benzyl Phthalate (BBP)	<1000 PPM (0.1% by weight)
Dibutyl Phthalate (DBP)	<1000 PPM (0.1% by weight)
Diisobutyl Phthalate (DIBP)	<1000 PPM (0.1% by weight)

REACH: Mercury Systems, Inc. neither uses nor intentionally adds any of the substances considered to be a Substance of Very High Concern (SVHC) as defined by the EU Regulation (EC) No. 1907-2006 on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH).

Conflict Materials: Mercury does not knowingly use materials that are sourced from the Democratic Republic of Congo (DRC) or any other known conflict regions. Mercury's supply chain is comprised of sources that are both environmentally and socially responsible. We periodically review this requirement with our vendors to ensure continued compliance.

Mercury takes its responsibility as a global partner seriously and will use due diligence within our supply chain to ensure all standards are met to the best of our knowledge.



Corporate Headquarters

50 Minuteman Road
Andover, MA 01810 USA
+1 978.967.1401 tel
+1 866.627.6951 tel
+1 978.256.3599 fax

International Headquarters

Mercury International

Avenue Eugène-Lance, 38
PO Box 584
CH-1212 Grand-Lancy 1
Geneva, Switzerland
+41 22 884 5100 tel

Learn more

Visit: mrcy.com

For pricing details, contact: MMICsales@mrcy.com

For technical details, contact: MMICsupport@mrcy.com



The Mercury Systems logo is a registered trademark of Mercury Systems, Inc. Other marks used herein may be trademarks or registered trademarks of their respective holders. Mercury products identified in this document conform with the specifications and standards described herein. Conformance to any such standards is based solely on Mercury's internal processes and methods. The information contained in this document is subject to change at any time without notice.

