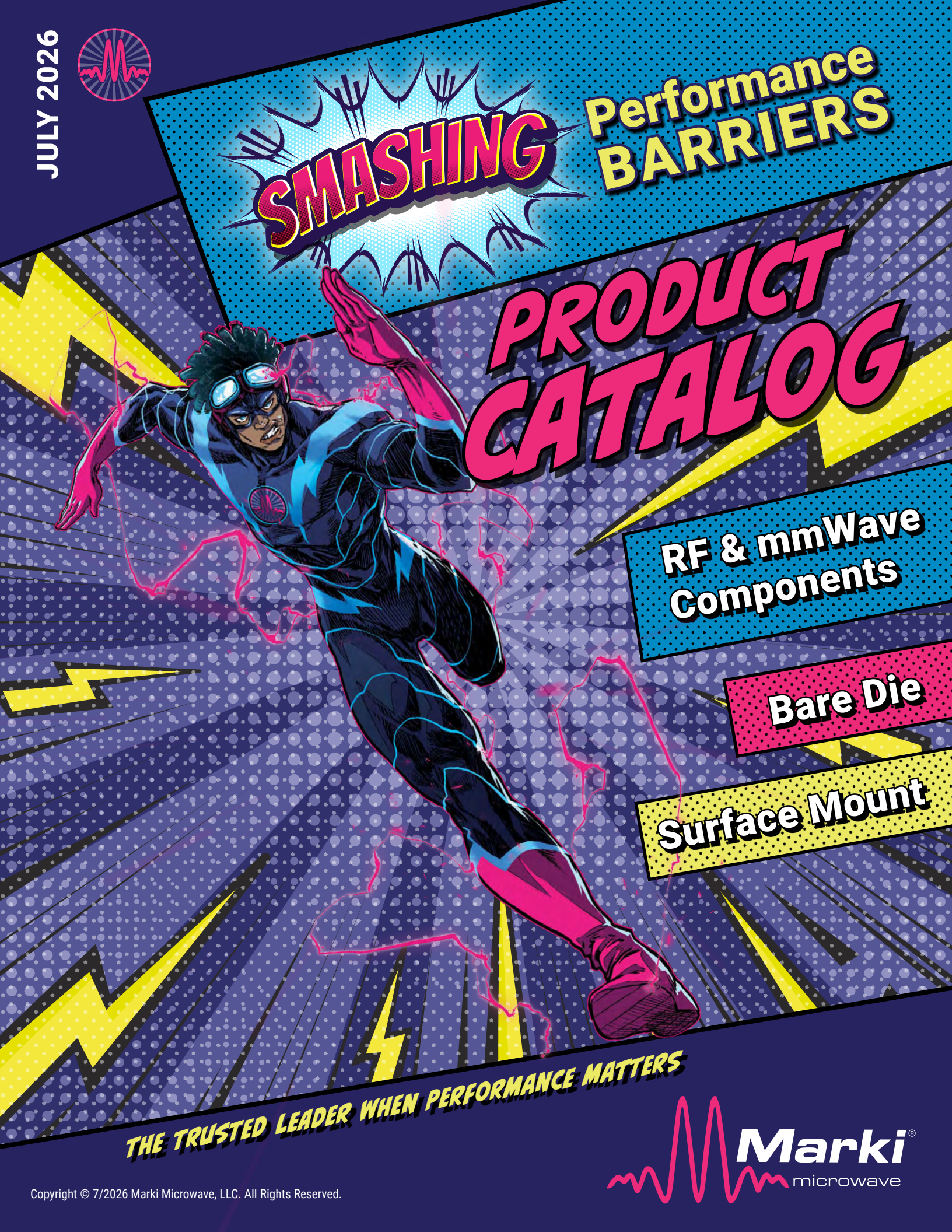
JULY 2026

SMASHING Performance BARRIERS

PRODUCT CATALOG



RF & mmWave Components

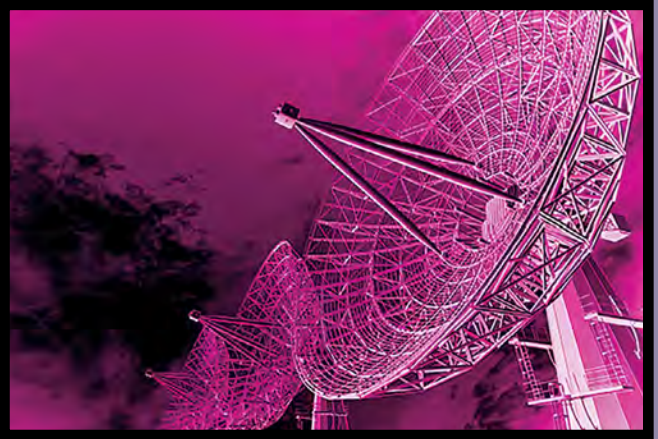
Bare Die

Surface Mount

THE TRUSTED LEADER WHEN PERFORMANCE MATTERS

Marki® microwave

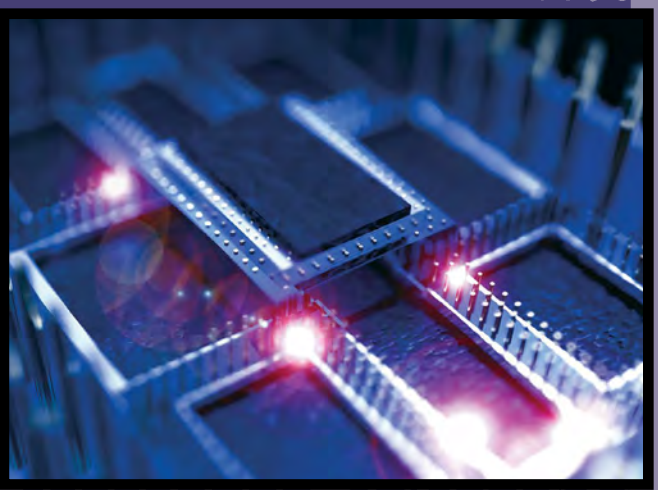
Marki Microwave holds a unique place in the RF and millimeter wave industry, combining time-honored hybrid fabrication and assembly techniques with a modern MMIC design approach. This enables us to push the technological boundaries of broadband RF and microwave components like never before, supporting frequencies from DC to sub-terahertz.



Marki Microwave's right-first-time design methodology ensures the simulation data we deliver provides a highly accurate representation of actual device performance under real operating conditions. This methodology enables efficient reuse of our extensive IP portfolio, addressing diverse application requirements while reducing design iteration cycles and accelerating time-to-deployment. At the core of this capability is a unified simulation flow employed across our engineering organization, incorporating full 3D electromagnetic simulation for all MMIC products, including the die, package interfaces, RF launches, and, where applicable, the final mechanical enclosure. These simulations are executed using custom process design kits (PDKs) and leverage a validated and continuously expanding IP library, ensuring first-pass success and high correlation between simulated and measured performance from concept through production release.

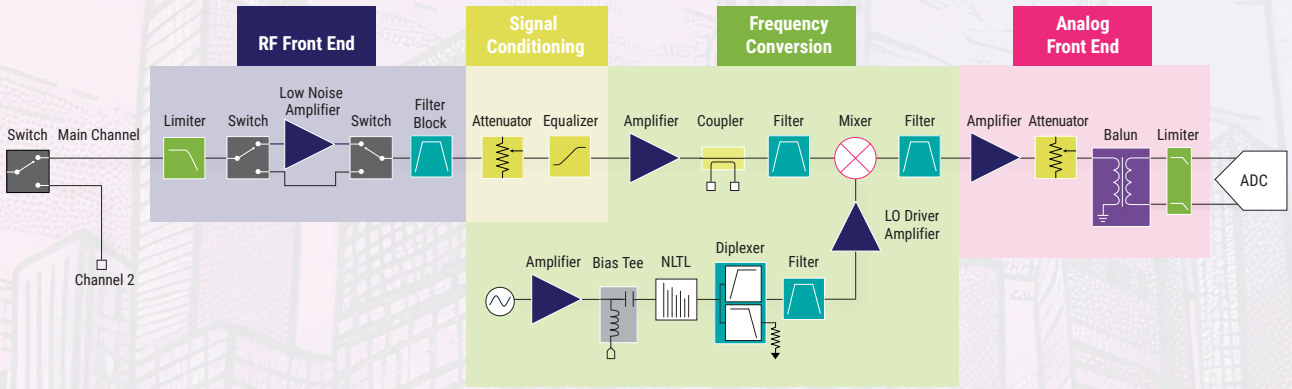
System-level trends are driving frequencies higher, supporting wider bandwidths, all in form factors that enable more capabilities in the same or smaller footprint. By co-designing the die and package, Marki Microwave ensures optimal performance at the board level. From conventional QFN to our chip scale packaging (CSP) that delivers up to 90 GHz in a surface mount footprint and multi-chip module capabilities, Marki Microwave continues to lead in packaging innovation.

Marki Microwave delivers one of the most comprehensive selections of high-performance die, surface mount, connectorized, and waveguide microwave components in the world, and we have only just started!



THE TRUSTED LEADER
WHEN PERFORMANCE MATTERS

For more than 30 years, Marki Microwave has pushed the boundaries of RF and microwave performance through a portfolio of industry-leading, high-frequency components. Founded in 1991 with a mission to build the industry's best mixers, the company now delivers broadband solutions across the entire RF signal chain, supporting applications from DC to sub-THz frequencies in die, surface-mount, and connectorized form factors.



Trusted globally by innovators in aerospace and defense, test and measurement, and satellite communications, Marki Microwave continues to engineer the technology breakthroughs powering next-generation systems.

Learn more at www.markimicrowave.com.

SPACE & HI-REL

Since our inception over 30 years ago, Marki Microwave has developed a long and successful history in space applications. Our capabilities cover both space and Hi-Rel for military applications, supporting die, surface mount, connectorized, and waveguide products.

Most of Marki Microwave's catalog can be upscreened in-house to meet the various qualification requirements of GEO and LEO applications, including:

- Earth Observance
- Communications
- Military
- GPS
- Weather Forecasting
- Telescopes
- Remote Sensing

Our test flows support various military and NASA requirements for both active and passive products Marki Microwave builds. The standards define the general requirements as well as the quality assurance and reliability requirements of such components used in military and other high reliability programs. Our qualification plans are designed to meet the following standards:

PACKAGE/TECH	PRODUCT TYPE	STANDARD
Surface Mount Core and Wire	Hybrid Baluns, T3 Mixers	MIL STD 981
Bare Die	Active or passive component in Marki catalog	MIL PRF 38534
Non-Hermetic Plastic Surface Mount	Active or passive component in Marki catalog	NASA EEE-INST-002
Non-Hermetic Ceramic Surface Mount	Active or passive component in Marki catalog	MIL PRF 38535

Marki Microwave has successfully qualified the parts below, demonstrating our commitment to delivering high-performance RF solutions for the most demanding applications.

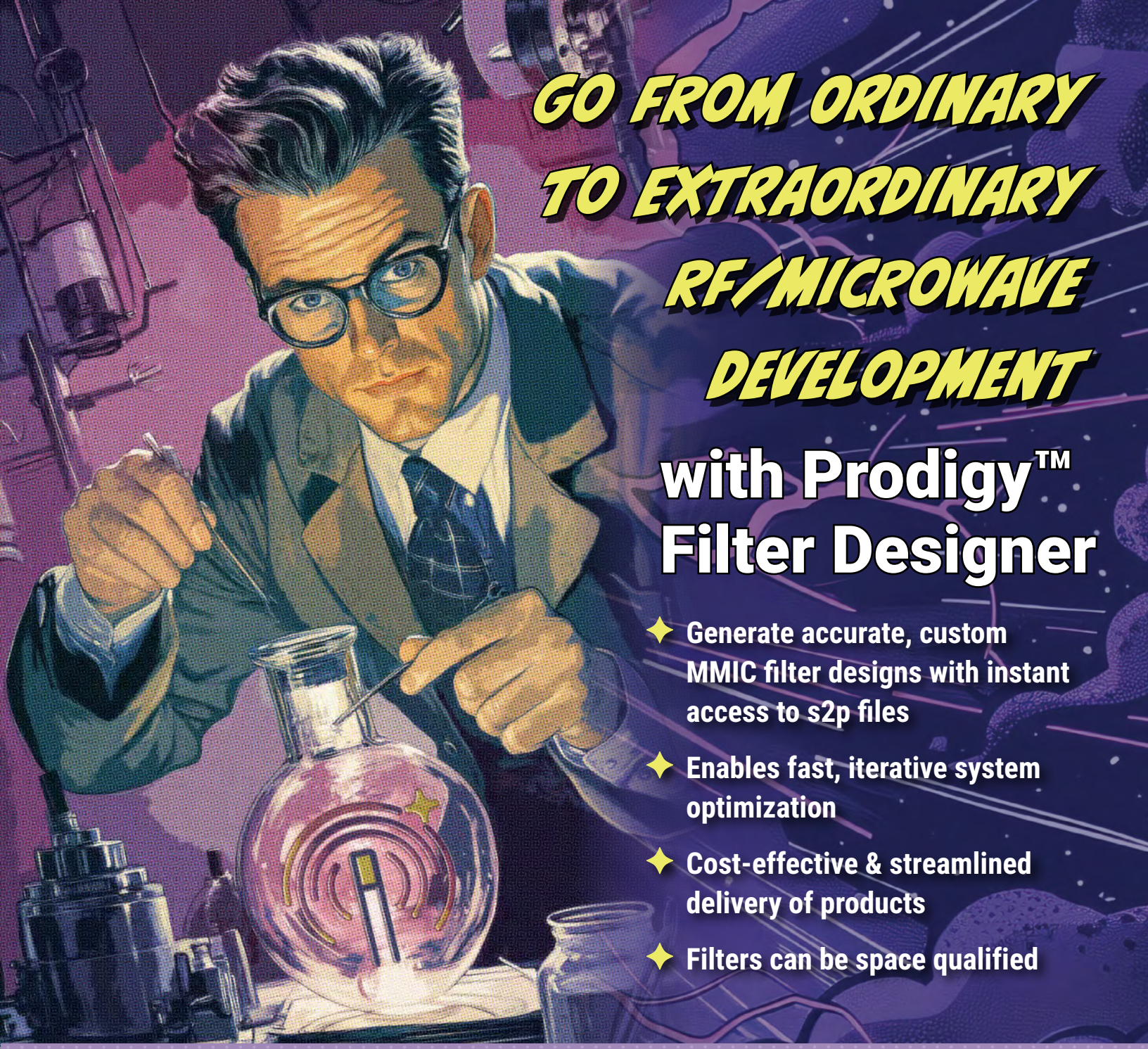
Part Number	Product Description	Package	Screen Level
BALHB-0003SM	Broadband Balun 500 kHz - 3 GHz	SMT Core & Wire	MIL-STD-981, Class B
BALHB-0006SM	Broadband Balun 500 kHz - 6 GHz	SMT Core & Wire	MIL-STD-981, Class B
BALB-0009SMG	Broadband Balun 500 kHz - 9 GHz	SMT Core & Wire	MIL-STD-981, Class B
BALS-0003SMG	Broadband Balun 500 kHz - 3 GHz	SMT Core & Wire	MIL-STD-981, Class S
BALS-0006SMG	Broadband Balun 500 kHz - 6 GHz	SMT Core & Wire	MIL-STD-981, Class S
BALB-0012SSG	Broadband Balun 10 MHz - 12 GHz	SMT Core & Wire	MIL-STD-981, Class B
MFHPN-00001PSM	MMIC Highpass Filter 2 GHz	SMT	NASA EEE-INST-002
MMIQN-0205HSM-2	MMIC Mixer RF 1.75 - 5 GHz	SMT	NASA EEE-INST-002
MFBCX-12PSM	MMIC Bandpass Filter 17.2 - 23.2 GHz	SMT	Custom Screening
MFBPX-8PSM	MMIC Bandpass Filter 10.4 - 13.8 GHz	SMT	Custom Screening
MEQ10X-7ASM	MMIC Equalizer 10 dB 7 GHz	SMT	Custom Screening
MDPX-0305PSM-1	MMIC Diplexer DC - 3 - 5 GHz	SMT	Custom Screening
ATNX06-0040PSM	MMIC Attenuator 6 dB 40GHz	SMT	Custom Screening
MM1H-0212HCH-2	MMIC Mixer RF 2 - 12 GHz	Die	MIL-PRF-38534, Class H
MM1H-0312HCH-2	MMIC Mixer RF 3 - 12 GHz	Die	MIL-PRF-38534, Class H
MM1H-0320LCH-2	MMIC Mixer RF 3 - 20 GHz	Die	MIL-PRF-38534, Class H
MM1H-0626HCH-2	MMIC Mixer RF 6 - 26.5 GHz	Die	MIL-PRF-38534, Class H
MM1H-1044HCH-2	MMIC Mixer RF 9 - 44 GHz	Die	MIL-PRF-38534, Class H
MM1H-1044LCH-2	MMIC Mixer RF 9 - 44 GHz	Die	MIL-PRF-38534, Class H
MM1H-1140HCH-2	MMIC Mixer RF 11 - 40 GHz	Die	MIL-PRF-38534, Class H
MM1H-1857LCH-2	MMIC Mixer RF 18 - 57 GHz	Die	MIL-PRF-38534, Class H
MM1H-2567LCH-2	MMIC Mixer RF 25 - 67 GHz	Die	MIL-PRF-38534, Class H
MM1K-0320LCH-2	MMIC Mixer RF 3 - 20 GHz	Die	MIL-PRF-38534, Class K
MM1K-0626HCH-2	MMIC Mixer RF 6 - 26.5 GHz	Die	MIL-PRF-38534, Class K
MM1K-0626SCH-2	MMIC Mixer RF 6 - 26.5 GHz	Die	MIL-PRF-38534, Class K
MM1K-0832HCH-2	MMIC Mixer RF 8 - 32 GHz	Die	MIL-PRF-38534, Class K
MM1K-1044HCH-2	MMIC Mixer RF 9 - 44 GHz	Die	MIL-PRF-38534, Class K
MM1K-1044LCH -2	MMIC Mixer RF 9 - 44 GHz	Die	MIL-PRF-38534, Class K
MM1K-1857HCH-2	MMIC Mixer RF 18 - 57 GHz	Die	MIL-PRF-38534, Class K
MM1K-2567LCH -2	MMIC Mixer RF 25 - 67 GHz	Die	MIL-PRF-38534, Class K
MM2H-0530HCH-2	MMIC Mixer RF 5-30 GHz	Die	MIL-PRF-38534, Class H
MM2K-0530HCH-2	MMIC Mixer RF 5-30 GHz	Die	MIL-PRF-38534, Class K
MM2K-0530LCH-2	MMIC Mixer RF 5-30 GHz	Die	MIL-PRF-38534, Class K
MMDH-1250CHC	MMIC Doubler output 12 - 50 GHz	Die	MIL-PRF-38534, Class H
MMDK-1030HCH	MMIC Doubler output 10 - 30 GHz	Die	MIL-PRF-38534, Class K
MT3HH-0113LCH-2	MMIC Mixer RF 1.5 - 13 GHz	Die	MIL-PRF-38534, Class H
NLTL-6794CH	MMIC NLTL 30 GHz	Die	Custom Screening

In addition to standard qualifications, Marki Microwave can develop custom solutions for nearly any project. Please contact support@markimicrowave.com if your needs differ from our standard qualification plans. We are constantly expanding our portfolio of space qualified products to cover the complete RF signal chain.

The Future of Filters Is Clear

Our next-generation, high-performance filters reset the bar in RF design, powered by Marki Microwave's proprietary OmniFlow design engine. Built on a new high-Q glass substrate, they deliver MMIC-level repeatability and push our filter portfolio into the MHz range. Verified models enable true first-pass success, with measurements that tightly match simulation data. Offered in compact footprints (LP/HP: 4.25 × 4 mm; BP: 7.5 × 4.2 mm), these filters drive the next wave of RF from 100 MHz to 6 GHz.

- **Replaces lumped-element and ceramic filters from VHF through C-Band**
- **Optimized for IF signal conditioning and anti-aliasing filter applications**
- **Handles up to 15 W CW with robust, reliable performance**



with Prodigy™ Filter Designer

- Generate accurate, custom MMIC filter designs with instant access to s2p files
- Enables fast, iterative system optimization
- Cost-effective & streamlined delivery of products
- Filters can be space qualified

RF systems have unique frequency plans and utilize RF filters to select bands of interest and reject unwanted signals. This often drives the need for custom filters and an iterative system optimization process, resulting in costly engineering time and longer design cycles. ***Generate instantaneous 3D FEM quality MMIC filter designs with Prodigy™, the new automated filter design tool from Marki Microwave.*** Powered by advanced FEM modeling and machine learning techniques, Prodigy puts MMIC filter design into the customer's hands.

START DESIGNING AT

www.markimicrowave.com/technical-resources/tools/filter-prodigy

PRODIGY™
FILTER DESIGNER

Smart RF DESIGN

Simplify Your Workflow with Marki Microwave Online Tools

www.markimicrowave.com/technical-resources/tools

Filter Tools

- Filter Search
- LC/Microstrip Designer
- Prodigy™ Filter Designer

Product Comparison Tools

- Performance Data Plotter
- S-Parameter Viewer

RF Utilities & Conversion Tools

- VSWR to Return Loss Converter
- Frequency to Wavelength Converter
- Conversion Tables

System Design & Simulation Tools

- Spur Calculator

When There's No Room for Error

BAL-0003SMG

BAL-0006SMG

MMIQ-0205HSM-2

BAL-0009SMG

BAL-0032SSG

MM1-1857HCH-2

Marki Microwave has a long, successful history in space and Hi-Rel military applications, with capabilities spanning die, surface mount, connectorized, and waveguide products.

- MIL-PRF-38534 Class K & H for Bare Die
- MIL-STD-981 Class S & B for SMT Hybrids (Core & Wire)
- NASA EEE-INST-002 PEM (Non-Hermetic Plastic Surface Mount)
- MIL-PRF-38535 Class Y (Non-Hermetic Ceramic Surface Mount)
- Custom Screening Available

TABLE OF CONTENTS

SURFACE MOUNT

BARE DIE

SUFFIX/GLOSSARY

SURFACE MOUNT

AMPLIFIERS, Driver

Part Number	Band (GHz)	Gain (dB)	Psat (dBm)	OIP3 (dBm)	Bias Voltage (V)	Bias Current (mA)	Package	ECCN
ADM-0012-5931SM	0-12	11.5	+19	+26	+3 to +7 VD and -0.3 to 0 VG	85	3mm QFN	EAR99
ADM-8344PSM	0-18	19	+20	+29	+4 to +8 VD and +3 to +6 VG	102	4mm QFN	EAR99
APM-7099SM[1]	0.01-20	14	+25	+27	+5 to +9 VC and +5 to +9 VB	72	4mm QFN	EAR99
APM-7516PSM[1]	1.5-20	11	+22	+33	+4 to +6 VC and +5 VB	105	4mm QFN	EAR99
APM-7098SM[1]	0.1-22	15	+23	+21	+5 to +9 VC and +5 to +9 VB	44	4mm QFN	EAR99
AMM-10220PSM	2-26	16	+17	+28	+5 VD and -0.3 to -0.5 VG	74	5mm QFN	EAR99
AMM-9619PSM	2-26	16.1	-	+28	+5 VD and -0.3 to -0.5 VG	74	4mm QFN	EAR99
ADM-0026-5929SM	0-26.5	13	+20	+26	+3 to +7 VD and -0.3 to 0 VG	165	4mm QFN	EAR99
AMM-7473PSM	0.4-27	17	+25	+34	+5 to +7 VD and -0.7 to -0.6 VG	150	4mm QFN	EAR99
ADM-8006PSM	2-30	23	+23	+30	+3 to +6 VG and +3 to +6 VD	218	4mm QFN	EAR99
APM-6849SM[1]	2-30	11	+21	+20	+3 to 6 VC and +3 to +6 VB	21	3mm QFN	EAR99
✦ **AMM-10858PSM***	3-30	20	+20	+29	+4 VD and -0.16 VG	84	3mm QFN	EAR99
✦ **AMM-10860PSM***	10-30	24.4	+22	+29	+4 VD and -0.16 VG	136	3mm QFN	EAR99
AMM-7199ASM*	11-38	21	+21	+29	+2.5 to +3 VD and -0.6 to -0.4 VG	150	3mm QFN	3A001.b.2.d
AMM-9856PSM	DC-40	10	-	+25	+5 VD and -0.4 to -0.2 VG	61	3mm QFN	3A001.b.2.d
ADM-8007PSM	2-40	23	+23	+30	+3 to +6 VD and +3 to +6 VG	218	4mm QFN	3A001.b.2.d
✦ **AMM-10859PSM***	4-45	21	+19	+27	+4 VD and -0.16 VG	96	3mm QFN	3A001.b.2.f
✦ **AMM-10861PSM***	15-45	24.5	+20.8	+28	+4 VD and -0.16 VG	143	3mm QFN	3A001.b.2.f
AMM-7200ASM	12-46	20	+20	+29	+2.5 to +3 VD and -0.6 to -0.4 VG	180	3mm QFN	3A001.b.2.d
AMM-10202PSM	15-50	23	+19	+24	+2 to +4 VD and -0.35 to -0.15 VG	200	4mm QFN	3A001.b.2.d
AMM-6702SM	20-50	24	+19	+27	+2 to +3 VD and -0.6 to -0.4 VG	180	4mm KFN	3A001.b.2.d
AMM-8211PSM	22-57	14	+20	+26	+2.5 to +3 VD and -0.6 to -0.4 VG	175	3mm QFN	3A001.b.2.d

[1]Low Phase Noise

***New Release since 4/2026**

All electrical specifications given are typical values.

AMPLIFIERS, Gain Block and Low Noise

Part Number	Band (GHz)	Gain (dB)	NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Voltage (V)	Current (mA)	Package	ECCN
ADM-8350PSM	0.09-6	23	1.8	+22	+40	+3 to +6VD	84	1.3x2mm DFN	EAR99
ADM-8096PSM	0.09-6	22	1.5	+21	+33	+3 to +6VD	58	1.3x2mm DFN	EAR99
ADM-8625PSM	0.75-8	18	1.5	+17	+27	+3 to +6VD	49	3mm QFN	EAR99
ADM-8622PSM	DC-10	15.5	2	+13.5	+26	+3.3 VD	40	1.3x2mm DFN	EAR99
ADM-8095PSM	0.09-10	18	1.2	+18	+30	+3 to +6VD	39	1.3x2mm DFN	EAR99
ADM-10711PSM	8-12	29.1	1.4	+3	+15	+3 to +6 VD	8	3mm QFN	EAR99
AKA-1300PSM	DC-14	13	5	+14	+28	+3.7 to +3.9 VD	50	1.3x2mm DFN	EAR99
AKA-1310PSM	DC-14	13	5	+14	+28	+4.5 to +4.7 VD	50	1.3x2mm DFN	EAR99
AKA-1400PSM	DC-14	17	4	+15	+28	+3.7 to +3.9 VD	50	1.3x2mm DFN	EAR99
AKA-1500PSM	DC-14	19	4	+16	+28	+4.1 to +4.3 VD	50	1.3x2mm DFN	EAR99
ADM-8475PSM	0.5-18	13	2	+16	+26	+3 to +6VD	40	1.3x2mm DFN	EAR99
ADM-10709PSM	6-18	27	1.5	+2.5	+15	+3 to +6 VD	8	3mm QFN	EAR99
ADM-10713PSM	12-18	27.3	1.6	+3	+15	+3 to +6 VD	8	3mm QFN	EAR99
AMM-9852PSM	DC-20	17.5	1.8	+20	+33	+5 VD and -0.2 to -0.4 VG	89	3mm QFN	EAR99
AMM-9853PSM	DC-20	16.5	1.8	+17	+28	+4 VD and -0.35 to -0.45 VG	45	3mm QFN	EAR99
AMM-9859PSM	DC-20	15.5	1.9	+14.5	+28	+4 VD and -0.4 to -0.5 VG	32	3mm QFN	EAR99
ADM-9028PSM	DC-20	17	2.5	+14.5	+24	+5 to +8 VD and +2 to +3 VB	50	4mm QFN	EAR99
ADM-8624PSM	0.2-20	11.5	2.8	+13.5	+25	+4 to +6 VD and +4 to +6 VG	40	1.3x2mm DFN	EAR99
ADM-10699PSM	2-20	15.1	2.3	+12.5	+24	+3 to +5 VD	54	3mm QFN	EAR99
ADM-10701PSM	2-20	13	2.4	+6.2	+18	+2 to +5 VD	16	3mm QFN	EAR99
ADM-11122PSM[1]	2-20	19	4.2	+14	+26	+4 VD	84	4mm QFN	EAR99
ADM-11123PSM	2-20	20.5	2.5	+4.8	+16	+3 VD	16	4mm QFN	EAR99
ADM-11124PSM	2-20	24.5	2.4	+12.8	+26	+4 VD	47	4mm QFN	EAR99
ADM-8536PSM	2-20	10	2.5	+13	+25	+3 to +6 VD and +3 to +6 VB	41	1.3x2mm DFN	EAR99
AMM-9858PSM	2-20	17.5	1.9	+18	+30	+4 to +5 VD and -0.2 to -0.5 VG	76	3mm QFN	EAR99
ADM-10721PSM	4-22	20	2.3	+4.7	+17	+3 to +5 VD	15	3mm QFN	EAR99
ADM-10715PSM	12-22	25.7	1.8	+2.3	+13	+3 to +5 VD	8	3mm QFN	EAR99
ADM-9027PSM	2-24	17	1.8	+17	+26	+5 to +7 VD and +2 to +3 VB	60	4mm QFN	EAR99
ADM-9181PSM	DC-26	14.5	3.2	+22	+31	+4 to +6 VD and +2 to +4.4 VB	130	4mm QFN	EAR99
AMM-9854PSM	DC-30	14	2.5	+17	+25	+5 VD and -0.2 to -0.4 VG	67	3mm QFN	EAR99
AMM-9855PSM	DC-30	13	2.2	+14	+26	+4 VD and -0.35 to -0.45 VG	40	3mm QFN	EAR99
AMM-9860PSM	3-30	13.5	2.7	+15.5	+28	+5 VD and -0.2 to -0.4 VG	38	3mm QFN	EAR99
AMM-9861PSM	3-30	11.7	2.5	+12.4	+24	+4 VD and -0.35 to -0.45 VG	21	3mm QFN	EAR99
ADM-10703PSM	3-30	10.8	3.3	+8.8	+18	+3 to +5 VD	39	3mm QFN	EAR99
ADM-10719PSM	20-31	22.6	2.1	+2.7	+14	+3 to +5 VD	8	3mm QFN	EAR99
✦ **ADM-11425PSM***	4-40	23	3.3	+10.5	+19.5	+4 to +6 VD	85	4mm QFN	EAR99
AMM-9862PSM	4-40	10	3.4	+13.3	+23	+5 VD and -0.2 to -0.4 VG	25	3mm QFN	EAR99
ADM-10717PSM	18-40	16.7	2.5	-2.5	+8	+3 to +5 VD	6	3mm QFN	EAR99
AMM-9024PSM	DC-50	11	3.3	+11.5	+23	+5 VD and -0.25 VG	45	3mm QFN	3A001.b.2.d

[1]High +55 dBm OIP2

***New Release since 4/2026**

All electrical specifications given are typical values.

ATTENUATORS

Part Number	Band (GHz)	Attenuation (dB)	Return Loss (dB)	Package	ECCN
ATN00-0040PSM	DC-40	0	27	1.3x2mm DFN	EAR99
ATN01-0040PSM	DC-40	1	27	1.3x2mm DFN	EAR99
ATN02-0040PSM	DC-40	2	26	1.3x2mm DFN	EAR99
ATN03-0040PSM	DC-40	3	25	1.3x2mm DFN	EAR99
ATN04-0040PSM	DC-40	4	21	1.3x2mm DFN	EAR99
ATN05-0040PSM	DC-40	5	20	1.3x2mm DFN	EAR99
ATN06-0040PSM	DC-40	6	22	1.3x2mm DFN	EAR99
ATN07-0040PSM	DC-40	7	21	1.3x2mm DFN	EAR99
ATN08-0040PSM	DC-40	8	21	1.3x2mm DFN	EAR99
ATN09-0040PSM	DC-40	9	20	1.3x2mm DFN	EAR99
ATN10-0040PSM	DC-40	10	25	1.3x2mm DFN	EAR99
ATN15-0040PSM	DC-40	15	22	1.3x2mm DFN	EAR99
ATN20-0040PSM	DC-40	20	22	1.3x2mm DFN	EAR99
✦ **ATD00-0040PSM*[1]**	DC-40	0	17	1.3x2mm DFN	EAR99
✦ **ATD01-0040PSM*[1]**	DC-40	1	23	1.3x2mm DFN	EAR99
✦ **ATD03-0040PSM*[1]**	DC-40	3	22	1.3x2mm DFN	EAR99
✦ **ATD06-0040PSM*[1]**	DC-40	6	23	1.3x2mm DFN	EAR99
✦ **ATD10-0040PSM*[1]**	DC-40	10	27	1.3x2mm DFN	EAR99
✦ **ATD20-0040PSM*[1]**	DC-40	20	23	1.3x2mm DFN	EAR99
ATN00-0070CSP1	DC-70	0.3	20	1.5mm CSP1	EAR99
ATN00-0070CSP2	DC-70	0	26	2.5mm CSP2	EAR99
ATN01-0070CSP1	DC-70	1.3	23	1.5mm CSP1	EAR99
ATN02-0070CSP1	DC-70	2.1	25	1.5mm CSP1	EAR99
ATN03-0070CSP1	DC-70	3.2	22	1.5mm CSP1	EAR99
ATN04-0070CSP1	DC-70	4.1	22	1.5mm CSP1	EAR99
ATN05-0070CSP1	DC-70	5.2	24	1.5mm CSP1	EAR99
ATN06-0070CSP1	DC-70	6	22	1.5mm CSP1	EAR99
ATN07-0070CSP1	DC-70	7.1	21	1.5mm CSP1	EAR99
ATN08-0070CSP1	DC-70	8.2	22	1.5mm CSP1	EAR99
ATN09-0070CSP1	DC-70	9.1	20	1.5mm CSP1	EAR99
ATN10-0070CSP1	DC-70	10.2	23	1.5mm CSP1	EAR99
ATN15-0070CSP1	DC-70	15.3	17	1.5mm CSP1	EAR99
ATN20-0070CSP1	DC-70	20.4	17	1.5mm CSP1	EAR99

[1]Differential Attenuator

***New Release since 4/2026**

All electrical specifications given are typical values.

BALUNS, Active

Part Number	Band (GHz)	Directionality	Mode Converter Gain (dB)	HD2 (dBc)	HD3 (dBc)	Voltage (V)	Current (mA)	Package	ECCN
ABDS-10170PSM	DC-30	Differential to Single Ended	+2.5	48	44	+4V and -4V	+67 and -67	3mm QFN	EAR99
ABSD-10168PSM	DC-30	Single Ended to Differential	+3.5	39	45	+4V and -4V	+72 and -72	3mm QFN	EAR99
ABSD-10169PSM	DC-30	Single Ended to Differential	+9	52	37	+5V and -5V	+137 and -116	3mm QFN	EAR99

BALUNS, Passive

Part Number	Band (GHz)	Impedance Ratio	CMRR (dB)	Amp Bal (dB)	Phase Bal (°)	Insertion Loss as a Mode Converter (dB)	Isolation (dB)	Package	ECCN
BAL-0003SMG	0.0005-3	2:1	45	0.1	3	3.8	9	SMG	EAR99
BALH-0003SMG	0.0005-3	1:1	35	0.2	2	1.9	7	SMG	EAR99
BAL-0006SMG	0.0005-6	2:1	45	0.1	3	3.8	8	SMG	EAR99
BALH-0006SMG	0.0005-6	1:1	32	0.2	2	1.9	6	SMG	EAR99
BAL-0009SMG	0.0005-9	2:1	45	0.1	0.9	3.8	8	SMG	EAR99
BALH-0009SMG	0.0005-9	1:1	32	0.2	2	1.9	7	SMG	EAR99
BAL-0012SSG	0.01-12	2:1	26	0.6	5	5	8	SSG	EAR99
BALH-0012SSG	0.01-12	1:1	25	0.6	5	2	6	SSG	EAR99
BAL-0020SLG	0.01-20	2:1	35	0.4	5	4.5	12	SLG	EAR99
BAL-0032SSG	0.01-32	2:1	25	0.5	5	5	8	SSG	EAR99
MBAL-0R106CSP2	0.1-6	2:1	33	0.1	0.5	3.3	6	2.5mm CSP2	EAR99
MBALH-0R106CSP2	0.1-6	1:1	35	0.2	0.4	3.5	9	2.5mm CSP2	EAR99
MBAL-0R520CSP2	0.5-20	2:1	31	0.2	2.3	3	7	2.5mm CSP2	EAR99
MBALH-0R520CSP2	0.5-20	1:1	32	0.3	2	3.6	9	2.5mm CSP2	EAR99
MBAL-0104SM	1-4	2:1	33	0	2	2.5	8	4mm QFN	EAR99
MBAL-0208SMG	2-8	2:1	32	0.1	2.4	1.9	18	2.69x2.9mm DFN	EAR99
MBAL-0214PSM	2-14	2:1	32	0.3	1.9	2.1	11	1.3x2mm DFN	EAR99
MBAL-0220CSP2(-1)	2-20	2:1	27	0.3	3	1.9	5.3	2.5mm CSP2	EAR99
MBAL-0220SM	2-20	2:1	30	0.25	3	6	10	4mm QFN	EAR99
MBAL-0220PSM	2-20	2:1	38	0.1	0.7	2.7	17	3mm QFN	EAR99
MBAL-0250CSP2	2-50	2:1	35	0.3	2.1	5.3	7	2.5mm CSP2	EAR99
MBAL-0260CSP2	2-60	2:1	33	0.4	0.4	6.3	8	2.5mm CSP2	EAR99
MBAL-0416SMG	4-16	2:1	29	0.2	3.0	1.7	18	2.69x2.9mm DFN	EAR99
MBAL-0422PSM	4-22	2:1	31	0.2	2.5	1.7	13	1.3x2mm DFN	EAR99
MBAL-0620SMG	6-20	2:1	28	0.2	3.2	1.7	18	2.69x2.9mm DFN	EAR99
MBAL-0624PSM	6-24	2:1	28	0.2	3.5	1.7	19	1.3x2mm DFN	EAR99
MBAL-1445SM	14-45	2:1	33	0.2	2.5	4.5	18	4mm QFN	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

BIAS TEES

Part Number	Band (GHz)	Insertion Loss (dB)	DC Current (A)	DC Port Isolation (dB)	DC Voltage (V)	Package	ECCN
BT-0010SMG(-1/-2)	0.02-10	0.5	0.5	40	30	SMG	EAR99
BTL-0012SMG(-1/-2)	0.0005-12	0.5	0.5	35	30	SMG	EAR99
BTL-0026SMG(-1/-2)	0.0005-26	1	0.5	35	30	SMG	EAR99
BTM-0026PSM(-1/-2)	0.01-26	0.43	0.32	25	16	SMG	EAR99
BT-0026SMG(-1/-2)	0.02-26	1	0.5	40	35	SMG	EAR99
BTL-0035SMG(-1/-2)	0.0005-35	1	0.5	35	30	SMG	EAR99
BT-0035SMG(-1/-2)	0.02-35	1	0.5	35	30	SMG	EAR99

COUPLER, Directional

Part Number	Band (GHz)	VSWR	Mean Coupling (dB)	Directivity (dB)	Package	ECCN
MC16-0222SM	2-22	1.22	16	23	4mm QFN	EAR99

COUPLERS, Hybrid

Part Number	Band (GHz)	Amp Bal (dB)	Phase Bal (°)	Isolation (dB)	Package	ECCN
✦ MQH-0612CSP3*	6-12	0.5	0.5	27	3.5mm CSP3	EAR99
✦ MQH-0516PSM*	5-16	0.3	3	27	5mm QFN	EAR99
MQS-0218SM	2-18	1	3	15	4mm QFN	EAR99
MQS-0518SM	5-18	0.5	2.5	17	4mm QFN	EAR99
✦ MQH-0919CSP3*	9-19	0.5	0.4	28	3.5mm CSP3	EAR99
✦ MQH-1329CSP3*	13-29	0.6	0.6	23	3.5mm CSP3	EAR99
✦ MQH-1840CSP3*	18-40	0.6	0.2	27	3.5mm CSP3	EAR99
✦ MQH-2655CSP3*	26-55	0.5	1.1	23	3.5mm CSP3	EAR99

EQUALIZERS, Positive Gain Slope

Part Number	Band (GHz)	Low Freq Attenuation (dB)	Typ Return Loss (dB)	Package	ECCN
MEQX-7ASM	DC-7	3, 6, 10, 12.5	29, 29, 27, 27	3mm QFN	EAR99
MEQX-14ASM	DC-14	3, 6, 10, 14	23, 28, 29, 29	3mm QFN	EAR99
MEQX-20ASM	DC-20	0, 3, 5, 6, 7.5, 10, 11	23, 19, 22, 23, 26, 20, 27	3mm QFN	EAR99
MEQX-20CSP1	DC-20	3, 6, 9, 20	25, 25, 25, 25	1.5mm CSP1	EAR99
MEQX-26CSP1	DC-26	6, 10	23, 17	1.5mm CSP1	EAR99
MEQX-40CSP1	DC-40	3, 6, 9, 20	26, 21, 23, 23	1.5mm CSP1	EAR99
MEQX-45CSP1	DC-45	6, 10	17, 13	1.5mm CSP1	EAR99
MEQX-67CSP1	DC-67	6, 9	25, 24	1.5mm CSP1	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

DIPLEXERS and QUADPLEXERS

Part Number	Passband (GHz)	Isolation (dB)	Type	Package	ECCN
DPX-M50(-1/-2)	DC-0.035 / 0.07-10	24	Diplexer	SM	EAR99
DPX-0R5(-1/-2)	DC-0.36 / 0.7-8	24	Diplexer	SM	EAR99
DPX-1(-1/-2)	DC-0.85 / 1.4-5	24	Diplexer	SM	EAR99
DPX-2(-1/-2)	DC-1.5 / 2.7-7	25	Diplexer	SM	EAR99
DPX-3(-1/-2)	DC-2.3 / 4.2-8	25	Diplexer	SM	EAR99
DPX-4(-1/-2)	DC-2.8 / 5.5-12	30	Diplexer	SM	EAR99
MDPX-0305PSM-1	DC-3 / 5-26.5	53	Diplexer	3mm QFN	EAR99
MDPX-0407PSM-2	DC-4 / 7-26.5	38	Diplexer	3mm QFN	EAR99
MDPX-00003PSM	DC-4.13 / 6.3-25.61	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00004PSM	DC-5.61 / 8.29-27.87	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00009CSP3	DC-7 / 8-35	see datasheet	Reflectionless Diplexer	3.5mm CSP3	EAR99
MDPX-00005PSM	DC-7.49 / 10.5-28	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00006PSM	DC-9.3 / 12.63-28	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00007PSM	DC-10.63 / 14.71-28	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00008PSM	DC-13.1 / 16.51-28	see datasheet	Diplexer	4mm QFN	EAR99
MDPX-00010CSP3	DC-19.7 / 20.9-45	see datasheet	Diplexer	3.5mm CSP3	EAR99
MMPX-00001PSM	DC-4 / 6-8 / 10-12 / 14-20	see datasheet	Quadplexer	6mm QFN	EAR99
MMPX-00002PSM	DC-6 / 8-10 / 12-14 / 16-20	see datasheet	Quadplexer	6mm QFN	EAR99

FIXED FILTERS, Highpass

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Passband Return Loss (dB)	Package	ECCN
MFHP-00021GSM2	0.4	0.5	0.5	23	4.3x4mm GSM2	EAR99
MFHP-00022GSM2	1.2	1.5	1.6	20	4.3x4mm GSM2	EAR99
MFHP-00001PSM	1.4	2.0	3.0	19	4mm QFN	EAR99
MFHP-00023GSM2	2.3	2.9	3.1	17	4.3x4mm GSM2	EAR99
MFHP-00020CSP1	2.7	3.4	4.1	20	1.5mm CSP1	EAR99
MFHP-00014PSM	4.4	5.5	6.2	13	5mm QFN	EAR99
MFHP-00004PSM	5.0	5.8	6.2	20	4mm QFN	EAR99
MFHP-00005PSM	6.6	7.9	9.4	21	4mm QFN	EAR99
MFHP-00002PSM	8.2	9.7	11.0	16	4mm QFN	EAR99
MFHP-00006PSM	10.0	11.4	12.1	21	4mm QFN	EAR99
MFHP-00007CSP1	11.3	14.3	15.7	18	1mm CSP1	EAR99
MFHP-00008CSP1	13.1	17.3	18.1	14	1mm CSP1	EAR99
MFHP-00003PSM	13.5	15.3	17.6	16	4mm QFN	EAR99
MFHP-00009CSP1	14.5	19.0	19.8	18	1mm CSP1	EAR99
MFHP-00010CSP1	16.4	21.1	22.8	15	1mm CSP1	EAR99
MFHP-00011CSP1	18.2	23.4	24.4	15	1mm CSP1	EAR99
MFHP-00012CSP1	19.7	25.3	26.2	17	1mm CSP1	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

FIXED FILTERS, Lowpass

Part Number	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	Passband Return Loss (dB)	Package	ECCN
MFLP-00042GSM2	0.4	0.7	0.8	22	4.3x4mm GSM2	EAR99
MFLP-00043GSM2	1.3	1.5	1.7	31	4.3x4mm GSM2	EAR99
MFLP-00007PSM	1.5	2.0	2.4	27	4mm QFN	EAR99
MFLP-00022CSP1	1.7	2.1	2.5	27	1.5mm CSP1	EAR99
MFLP-00046GSM2	2.0	2.3	2.5	23	4.3x4mm GSM2	EAR99
MFLP-00023CSP1	2.0	2.6	3.1	28	1.5mm CSP1	EAR99
MFLP-00008PSM	2.4	3.2	3.9	25	4mm QFN	EAR99
MFLP-00044GSM2	2.6	3.0	3.3	24	4.3x4mm GSM2	EAR99
MFLP-00009PSM	3.1	4.2	5.2	27	4mm QFN	EAR99
MFLP-00010PSM	3.4	4.5	5.4	28	5mm QFN	EAR99
MFLP-00024CSP1	3.6	4.5	5.2	31	1.5mm CSP1	EAR99
MFLP-00025CSP1	3.7	4.8	5.5	27	1.5mm CSP1	EAR99
MFLP-00045GSM2	4.4	4.9	5.5	25	4.3x4mm GSM2	EAR99
MFLP-00001PSM	5.2	6.2	7.0	22	4mm QFN	EAR99
MFLP-00026CSP1	5.2	6.4	7.3	27	1.5mm CSP1	EAR99
MFLP-00011PSM	6.0	7.1	8.0	31	5mm QFN	EAR99
MFLP-00012PSM	7.5	9.2	10.3	29	5mm QFN	EAR99
MFLP-00002PSM	8.4	9.4	11.0	24	4mm QFN	EAR99
MFLP-00028CSP1	8.5	10.7	12.1	24	1.5mm CSP1	EAR99
MFLP-00013CSP1	9.9	11.7	13.4	25	1mm CSP1	EAR99
MFLP-00003PSM	10.2	12.3	14.6	21	4mm QFN	EAR99
MFLP-00029CSP1	10.3	12.9	14.7	24	1.5mm CSP1	EAR99
MFLP-00030CSP1	10.4	14.7	17.1	27	1.5mm CSP1	EAR99
MFLP-00014CSP1	13.1	15.1	17.1	29	1mm CSP1	EAR99
MFLP-00004PSM	13.3	15.4	18.5	23	4mm QFN	EAR99
MFLP-00031CSP1	13.5	16.1	17.7	27	1.5mm CSP1	EAR99
MFLP-00032CSP1	14.7	16.8	18.5	28	1.5mm CSP1	EAR99
MFLP-00015CSP1	16.0	18.2	20.9	29	1mm CSP1	EAR99
MFLP-00005PSM	16.9	18.5	21.1	21	4mm QFN	EAR99
MFLP-00033CSP1	17.2	19.0	20.9	26	1.5mm CSP1	EAR99
MFLP-00034CSP1	17.7	20.3	22.1	30	1.5mm CSP1	EAR99
MFLP-00035CSP1	20.2	23.2	25.8	22	1.5mm CSP1	EAR99
MFLP-00036CSP1	21.6	25.0	27.6	24	1.5mm CSP1	EAR99
MFLP-00037CSP1	23.3	26.8	28.9	28	1.5mm CSP1	EAR99
MFLP-00038CSP1	25.8	28.8	31.1	23	1.5mm CSP1	EAR99
MFLP-00039CSP1	27.4	30.5	32.9	24	1.5mm CSP1	EAR99
MFLP-00040CSP1	29.5	32.7	35.6	25	1.5mm CSP1	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

FIXED FILTERS, Bandpass

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @fc (dB)	Package	ECCN
MFBP-00164GSM1	0.4	0.4	0.4	0.7	1.0	1.0	1.3	0.9	7.5x4.25mm GSM1	EAR99
MFBP-00165GSM1	0.7	0.8	0.8	1.1	1.6	1.6	1.9	1.0	7.5x4.25mm GSM1	EAR99
MFBP-00162GSM1	1.2	1.4	1.4	1.7	2.0	2.1	2.3	1.7	7.5x4.25mm GSM1	EAR99
MFBP-00163GSM1	1.2	1.4	1.4	1.9	2.4	2.5	2.9	1.2	7.5x4.25mm GSM1	EAR99
MFBP-00161GSM1	1.7	1.9	2.0	2.2	2.5	2.6	2.9	1.9	7.5x4.25mm GSM1	EAR99
MFBP-00094PSM	1.4	1.8	2.0	2.8	4.0	4.3	4.7	2.2	5mm QFN	EAR99
MFBP-00108CSP3	1.5	1.8	2.1	2.9	4.0	4.4	4.8	2.0	3.5mm CSP3	EAR99
✦ **MFBP-00183PSM***	2.7	2.9	3.0	3.1	3.3	3.4	3.6	4.3	5mm QFN	EAR99
MFBP-00124PSM	2.8	3.0	3.0	3.3	3.5	3.6	3.9	3.4	5mm QFN	EAR99
MFBP-00088PSM	2.2	2.5	2.7	3.3	4.1	4.4	4.8	2.8	5mm QFN	EAR99
MFBP-00010PSM	1.4	1.9	2.2	3.6	5.9	6.2	7.0	1.5	5mm QFN	EAR99
MFBP-00150PSM	2.3	2.6	2.8	3.6	4.6	4.9	5.3	1.9	5mm QFN	EAR99
MFBP-00160GSM1	2.5	2.7	2.9	3.7	4.7	5.0	5.3	1.2	7.5x4.25mm GSM1	EAR99
MFBP-00011PSM	1.4	1.9	2.4	4.3	8.0	8.5	9.8	1.2	5mm QFN	EAR99
MFBP-00092PSM	3.2	3.4	3.6	4.4	5.5	5.9	6.7	2.0	5mm QFN	EAR99
MFBP-00155CSP3	1.3	1.7	2.1	4.7	10.2	11.4	12.5	1.0	3.5mm CSP3	EAR99
MFBP-00095PSM	3.1	3.7	4.0	4.9	6.1	6.4	7.0	2.5	5mm QFN	EAR99
MFBP-00109CSP3	3.1	3.7	4.0	4.9	6.1	6.5	7.2	2.4	3.5mm CSP3	EAR99
MFBP-00001PSM	3.8	4.5	4.7	5.4	6.2	6.4	7.3	1.3	5mm QFN	EAR99
MFBP-00125PSM	4.8	5.1	5.2	5.4	5.7	5.8	6.1	3.8	5mm QFN	EAR99
MFBP-00104PSM	4.4	4.8	4.9	6.3	8.0	8.8	9.4	2.2	5mm QFN	EAR99
MFBP-00003PSM	1.4	1.9	2.5	6.4	16.4	18.6	21.2	0.8	5mm QFN	EAR99
MFBP-00093PSM	5.5	5.9	6.0	6.5	7.0	7.2	7.7	2.8	5mm QFN	EAR99
MFBP-00002PSM	4.9	5.7	5.9	6.6	7.5	7.6	8.6	1.5	5mm QFN	EAR99
MFBP-00096PSM	4.8	5.6	5.9	7.0	8.4	8.7	9.5	2.6	5mm QFN	EAR99
MFBP-00110CSP3	4.9	5.7	6.0	7.1	8.4	8.8	9.7	2.5	3.5mm CSP3	EAR99
✦ **MFBP-00179PSM***	6.8	7.2	7.3	7.5	7.8	7.9	8.3	4.6	5mm QFN	EAR99
MFBP-00146CSP3	5.2	5.7	5.9	7.6	9.9	10.9	11.8	2.0	3.5mm CSP3	EAR99
FB-0785SM	6.4	7.1	7.3	7.8	8.5	8.6	9.4	2.2	SM	EAR99
MFBP-00004PSM	4.8	5.7	6.1	7.9	10.3	10.7	12.1	1.8	5mm QFN	EAR99
MFBP-00145CSP3	2.7	3.2	3.8	8.0	16.7	19.2	21.0	0.9	3.5mm CSP3	EAR99
MFBP-00090PSM	6.8	7.3	7.5	8.5	9.6	9.9	10.5	1.9	5mm QFN	EAR99
FB-0850SM	6.4	7.7	7.9	8.5	9.2	9.4	10.5	1.9	SM	EAR99
MFBC-00001PSM	6.4	7.3	7.4	8.5	9.8	10.2	10.8	1.9	5mm QFN	EAR99
MFBP-00097PSM	7.4	7.8	8.0	8.6	9.3	9.6	9.9	2.7	5mm QFN	EAR99
MFBP-00166PSM	7.6	8.0	8.2	8.7	9.3	9.5	9.8	3	5mm QFN	EAR99
MFBP-00059PSM	5.9	6.8	7.0	8.8	11.0	11.5	12.8	1.2	5mm QFN	EAR99
MFBP-00079CSP3	7.3	7.8	7.9	8.9	9.9	10.2	10.8	3.1	3.5mm CSP3	EAR99
FB-0900SM	6.8	8.2	8.4	9.0	9.6	9.8	10.9	2.2	SM	EAR99
MFBP-00098PSM	7.9	8.4	8.5	9.2	9.9	10.1	10.5	2.8	5mm QFN	EAR99
MFBP-00149PSM	8.1	8.6	8.7	9.2	9.7	9.9	10.2	3.4	5mm QFN	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

FIXED FILTERS, Bandpass (cont.)

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @ fc (dB)	Package	ECCN
MFBP-00167PSM	8.1	8.5	8.7	9.2	9.8	9.9	10.3	3.1	5mm QFN	EAR99
FB-0955SM	7.2	8.7	8.9	9.5	10.2	10.5	11.5	2.1	SM	EAR99
MFBP-00151CSP3	7.0	7.7	7.8	9.6	11.8	12.6	13.3	1.9	3.5mm CSP3	EAR99
MFBP-00099PSM	8.3	8.9	9.0	9.7	10.4	10.6	11.0	2.8	5mm QFN	EAR99
MFBP-00091PSM	7.8	8.4	8.6	9.7	11.0	11.4	11.9	2.0	5mm QFN	EAR99
MFBP-00168PSM	8.5	9.0	9.2	9.8	10.4	10.6	10.9	3	5mm QFN	EAR99
MFBP-00137PSM	7.0	7.4	7.7	9.9	12.8	13.8	14.6	1.8	5mm QFN	EAR99
MFBP-00105PSM	7.7	8.2	8.5	10.0	11.7	12.0	13.0	1.5	5mm QFN	EAR99
MFBP-00144CSP3	5.3	6.2	6.9	10.0	14.7	15.9	17.6	1.6	3.5mm CSP3	EAR99
MFBA-00004PSM	7.2	7.9	8.4	10.2	12.3	12.5	13.7	1.8	5mm QFN	EAR99
FB-1050SM	7.8	9.4	9.6	10.5	11.4	11.6	12.8	2.0	SM	EAR99
MFBP-00006PSM	6.3	7.7	8.2	10.5	13.5	14.1	16.2	1.8	5mm QFN	EAR99
MFBC-00002PSM	7.8	9.0	9.2	10.6	12.3	12.8	13.6	1.7	5mm QFN	EAR99
MFBP-00005PSM	4.8	5.7	6.3	10.6	18.1	19.0	21.3	1.1	5mm QFN	EAR99
MFBP-00080CSP3	9.4	9.9	10.1	11.0	11.9	12.3	12.8	3.4	3.5mm CSP3	EAR99
MFBP-00143CSP3	10.2	10.6	10.7	11.0	11.3	11.5	11.8	6.0	3.5mm CSP3	EAR99
FB-1140SM	8.4	10.2	10.4	11.3	12.4	12.6	14.1	2.0	SM	EAR99
MFBP-00085CSP3	8.1	8.6	9.0	11.4	14.4	15.2	16.3	1.8	3.5mm CSP3	EAR99
MFBP-00008PSM	9.4	10.0	10.4	12.0	13.8	14.2	15.2	1.7	5mm QFN	EAR99
MFBA-00003PSM	12.1	9.8	10.3	12.1	14.1	14.4	12.1	2.0	5mm QFN	EAR99
FB-1215SM	9.4	11.0	11.4	12.1	12.9	13.2	14.7	2.1	SM	EAR99
MFBP-00081CSP3	11.2	11.7	12.0	12.9	13.9	14.3	14.8	3.6	3.5mm CSP3	EAR99
FB-1300SMG	9.8	11.6	12.0	13.0	14.0	14.3	15.9	1.8	SM	EAR99
MFBP-00029PSM	11.4	11.9	12.2	13.1	14.0	14.2	14.7	2.7	5mm QFN	EAR99
✦ **MFBP-00187PSM***	11.9	12.5	12.6	13.1	13.5	13.7	14.1	4.2	5mm QFN	EAR99
MFBP-00106PSM	11.0	11.7	12.0	13.6	15.3	15.6	16.4	1.7	5mm QFN	EAR99
MFBP-00007PSM	8.2	9.5	10.3	13.7	18.2	18.8	21.3	1.8	5mm QFN	EAR99
MFBC-00003PSM	10.3	11.7	11.9	13.7	15.8	16.3	17.2	1.6	5mm QFN	EAR99
MFBP-00152CSP3	10.9	11.6	11.9	13.8	15.9	16.2	17.5	1.7	3.5mm CSP3	EAR99
MFBP-00138PSM	9.6	10.2	11.0	13.9	17.5	18.5	19.6	1.5	5mm QFN	EAR99
✦ **MFBP-00186PSM***	12.8	13.4	13.6	14.1	14.7	14.9	15.3	3.6	5mm QFN	EAR99
MFB-1445SM	12.5	13.3	13.5	14.3	15.1	15.4	17.4	3.7	3mm QFN	EAR99
MFBP-00074PSM	11.9	12.5	13.0	14.8	16.9	17.4	18.0	1.9	5mm QFN	EAR99
MFBP-00120PSM	12.5	13.3	13.5	14.9	16.4	16.7	17.4	2.1	5mm QFN	EAR99
MFBP-00082CSP3	13.2	13.8	14.0	14.9	15.9	16.3	16.8	2.7	3.5mm CSP3	EAR99
MFBP-00086CSP3	11.6	12.2	12.7	15.1	17.9	18.4	19.6	1.9	3.5mm CSP3	EAR99
FB-1575SMG	11.9	14.1	14.5	15.7	16.9	17.1	18.6	2.0	SM	EAR99
MFBP-00009PSM	12.8	13.6	14.1	15.9	17.9	18.4	19.5	1.9	5mm QFN	EAR99
MFBA-00001PSM	12.8	13.8	14.2	15.9	17.9	18.2	19.0	2.3	5mm QFN	EAR99
MFBC-00010PSM	13.0	13.9	14.6	16.6	18.9	19.5	21.0	1.7	5mm QFN	EAR99
MFBP-00107PSM	14.7	15.2	15.5	16.7	17.9	18.3	18.9	2.3	5mm QFN	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

FIXED FILTERS, Bandpass (cont.)

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @ fc (dB)	Package	ECCN
MFBP-00121PSM	14.1	15.3	15.5	16.9	18.4	18.7	19.5	1.9	5mm QFN	EAR99
MFBP-00030PSM	15.3	16.0	16.2	16.9	17.7	17.9	18.6	3.2	5mm QFN	EAR99
MFBP-00083CSP3	15.3	15.8	16.0	17.0	17.9	18.2	18.7	2.8	3.5mm CSP3	EAR99
MFBC-00004PSM	13.0	14.7	14.9	17.2	19.8	20.5	21.6	1.5	5mm QFN	EAR99
MFBC-00004CSP3	13.5	14.7	15.0	17.2	19.8	20.2	21.6	1.8	3.5mm CSP3	EAR99
MFBP-00173PSM	16.1	16.6	16.8	17.5	18.2	18.5	18.9	3.3	5mm QFN	EAR99
MFBP-00060PSM	11.6	13.5	13.8	17.6	22.5	23.5	25.5	1.0	5mm QFN	EAR99
MFBP-00064CSP3	14.4	15.6	15.8	17.7	19.7	20.2	21.2	2.0	3.5mm CSP3	EAR99
✦ **MFBP-00153CSP3***	14.7	15.6	16.0	17.9	20.0	20.3	21.7	2.0	3.5mm CSP3	EAR99
MFBP-00130PSM	18.1	17.0	17.3	18.1	19.0	19.3	18.1	2.8	5mm QFN	EAR99
MFBC-00011PSM	14.5	15.4	16.2	18.3	20.6	21.4	22.8	1.6	5mm QFN	EAR99
MFBP-00126CSP3	16.2	16.9	17.2	18.8	20.6	21.1	22.0	1.9	3.5mm CSP3	EAR99
MFBP-00122PSM	16.1	17.1	17.4	18.8	20.5	20.8	21.7	2.0	5mm QFN	EAR99
MFBP-00127CSP3	16.3	17.0	17.5	18.9	20.4	20.7	21.9	2.5	3.5mm CSP3	EAR99
MFBP-00061CSP3	16.4	17.2	17.4	18.9	20.4	20.8	21.6	2.0	3.5mm CSP3	EAR99
MFBP-00131PSM	16.9	17.7	18.0	19.0	20.0	20.3	21.0	2.7	5mm QFN	EAR99
MFBP-00034PSM	17.0	17.8	18.1	19.6	21.3	21.8	22.5	2.3	5mm QFN	EAR99
MFBP-00132PSM	17.7	18.4	18.8	19.7	20.6	20.9	21.5	2.9	5mm QFN	EAR99
MFBP-00065CSP3	16.4	17.6	17.8	19.8	22.0	22.4	23.5	2.2	3.5mm CSP3	EAR99
MFBC-00012PSM	15.6	16.5	17.3	20.0	23.2	23.8	25.3	1.5	5mm QFN	EAR99
✦ **MFBP-00140CSP3***	16.7	17.5	18.0	20.0	22.4	22.6	24.7	2.1	3.5mm CSP3	EAR99
MFBP-00036PSM	16.0	17.2	17.6	20.6	24.1	25.0	26.7	1.6	5mm QFN	EAR99
MFBP-00133PSM	18.6	19.4	19.8	20.7	21.7	22.0	22.6	3.0	5mm QFN	EAR99
MFBP-00123PSM	18.2	19.1	19.4	20.9	22.4	22.8	23.7	2.1	5mm QFN	EAR99
MFBP-00070CSP3	16.1	17.3	17.7	21.2	25.5	26.2	27.8	1.7	3.5mm CSP3	EAR99
MFBC-00005PSM	16.2	18.3	18.6	21.6	25.1	25.9	27.3	1.4	5mm QFN	EAR99
MFBA-00002PSM	21.7	17.7	18.2	21.7	25.8	26.2	21.7	1.6	5mm QFN	EAR99
MFBP-00066CSP3	18.4	19.4	19.8	21.8	24.1	24.4	25.8	2.2	3.5mm CSP3	EAR99
✦ **MFBP-00154CSP3***	18.3	19.5	20.1	22.0	24.1	24.4	25.7	2.1	3.5mm CSP3	EAR99
✦ **MFBP-00156CSP3***	15.7	16.9	17.5	22.5	28.8	29.5	32.0	1.6	3.5mm CSP3	EAR99
MFBP-00035PSM	19.4	20.3	20.6	22.5	24.6	25.1	26.0	2.2	5mm QFN	EAR99
MFBC-00013PSM	17.7	18.7	19.5	22.6	26.3	26.8	28.6	1.4	5mm QFN	EAR99
MFBP-00067CSP3	20.2	21.2	21.8	24.1	26.5	27.0	28.8	2.0	3.5mm CSP3	EAR99
MFBP-00037PSM	20.9	22.1	22.5	25.7	29.4	30.3	31.9	1.6	5mm QFN	EAR99
MFBC-00014PSM	20.4	21.5	22.2	25.7	29.7	30.5	32.1	1.7	5mm QFN	EAR99
✦ **MFBP-00158CSP3***	22.0	22.9	23.3	25.8	28.6	29.1	30.1	2.0	3.5mm CSP3	EAR99
✦ **MFBP-00181PSM***	22.8	23.8	24.1	26.2	28.5	29.2	29.9	1.8	5mm QFN	EAR99
✦ **MFBP-00180PSM***	22.4	23.3	24.1	26.8	29.8	30.5	31.6	1.5	5mm QFN	EAR99
MFBC-00006PSM	21.0	23.3	23.6	27.6	32.1	32.9	34.6	1.6	5mm QFN	EAR99
MFBP-00129CSP3	25.7	26.9	27.4	28.6	29.8	30.1	32.0	2.9	3.5mm CSP3	EAR99
MFBP-00062CSP3	26.3	27.2	27.5	28.7	29.9	30.3	30.9	2.8	3.5mm CSP3	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

FIXED FILTERS, Bandpass (cont.)

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @ fc (dB)	Package	ECCN
MFBP-00128CSP3	25.9	27.1	27.4	28.8	30.2	30.6	31.3	2.5	3.5mm CSP3	EAR99
MFBC-00015PSM	23.2	24.5	25.5	29.7	34.6	35.4	37.1	1.5	5mm QFN	EAR99
MFBP-00038PSM	26.0	27.1	27.7	30.7	34.1	35.3	36.3	2.1	5mm QFN	EAR99
MFBP-00058PSM	28.3	29.5	29.9	30.9	32.0	32.4	32.9	2.7	5mm QFN	EAR99
MFBP-00028PSM	29.5	30.5	30.8	31.5	32.2	32.5	33.0	3.3	5mm QFN	EAR99
MFBP-00118CSP3	24.0	25.7	26.3	32.2	39.4	40.8	43.6	1.4	3.5mm CSP3	EAR99
MFBP-00031PSM	30.9	31.9	32.1	32.6	33.0	33.3	34.4	4.3	5mm QFN	EAR99
MFBP-00033PSM	30.4	31.6	32.0	32.6	33.3	33.6	34.1	3.4	5mm QFN	EAR99
✦ MFBP-00157CSP3*	25.4	26.8	27.8	33.1	39.5	40.7	44.4	1.7	3.5mm CSP3	EAR99
MFBP-00072CSP3	29.2	30.1	30.8	33.3	36.1	36.8	38.0	2.6	3.5mm CSP3	EAR99
MFBC-00007PSM	25.5	29.5	30.2	34.3	39.0	40.4	42.1	1.4	5mm QFN	EAR99
MFBP-00027PSM	32.2	33.7	34.2	35.1	36.1	36.6	37.1	3.1	5mm QFN	EAR99
MFBC-00016PSM	27.6	29.6	30.7	35.4	40.9	42.1	43.9	1.3	5mm QFN	EAR99
MFBP-00039PSM	30.9	32.1	33.1	35.6	38.4	40.0	41.2	2.5	5mm QFN	EAR99
MFBP-00032PSM	33.3	34.8	35.2	36.0	36.9	37.3	37.8	3.5	5mm QFN	EAR99
✦ MFBP-00159CSP3*	33.0	34.4	35.2	37.6	40.3	43.6	45.1	2.1	3.5mm CSP3	EAR99
MFBP-00057CSP3	27.9	30.1	31.5	37.7	45.0	46.8	52.7	1.8	3.5mm CSP3	EAR99

FIXED FILTERS, Reflectionless

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @fc (dB)	Package	ECCN
MFQH-00001PSM	17.0	18.2	18.5	19.8	21.2	21.5	22.3	3.2	5mm QFN	EAR99

CONFIGURABLE FILTERS, Tunable

Part Number	Center Freq (GHz)	3dBc Passband (GHz)	Insertion Loss at Center Freq (dB)	Passband Return Loss (dB)	Stopband Rejection (dB)	OIP3 (dBm)	Package	ECCN
MFBT-00001PSM	3.5-9.5	3.0-10.0	6.5	15	35	33	4mm QFN	3A001.b.5.a
MFBT-00002PSM	5.5-15.5	4.5-16.5	6.5	15	35	33	4mm QFN	3A001.b.5.a
MFBT-00003PSM	10.0-26.0	8.0-30.0	7.5	10	35	35	4mm QFN	3A001.b.5.a

***New Release since 4/2026**

All electrical specifications given are typical values.

LIMITERS

Part Number	Band (GHz)	Loss (dB)	Flat Leakage (dBm)	Average Power Handling (W)	Peak Power Handling (W)	P1dB (dBm)	Package	ECCN
DLM-10SM[1]	DC-10	0.75	Adjustable	0.5	—	+10	3mm QFN	EAR99
HLM-100001PSM[1]	DC-10	0.9	+8.5@10GHz	10	—	+11	3mm QFN	EAR99
HLM-20PSM[1]	DC-20	0.5	+13@20GHz	5	50	+15	4mm QFN	EAR99
HLM-40PSM[1]	DC-40	0.5	+15@20GHz	2.5	9.5	+14	4mm QFN	EAR99
HLM-8010CSP1[1]	DC-40	0.5	+11@20GHz	1.9	3.2	+11	1.5mm CSP1	EAR99
HLM-70CSP2[1]	DC - 70	0.5	+13@40GHz	1	—	+15	2.5mm CSP2	EAR99

[1]Power ratings are dependent on frequency, temperature, and pulse conditions

IQ MIXERS

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	Image Rej (dBc)	L-R Isolation (dB)	Package	ECCN
MMIQ-0106HCSM	1.5-5.5	DC-3	8	33	62	5mm QFN	EAR99
MMIQ-0205HSM	1.75-5	DC-2	8	32	61	5mm QFN	EAR99
MMIQ-0218(L/H)SM	2-18	DC-3	8	27/35	58/53	6mm QFN	EAR99
MMIQ-0416(L/H)SM	4-16	DC-6	9/8.5	35/31	51	4mm QFN	EAR99
MMIQ-0520(L/H)SM	5-20	DC-6	9	35	46/39	4mm QFN	EAR99
MMIQ-0626(L/H)SM	6-26	DC-6	9	35	39/36	4mm QFN	EAR99
MMIQ-1040(L/H)SM	10-40	DC-10	9	35	50/40	4mm QFN	EAR99
MMIQ-1867(L/H)SM	18-67	DC-23	9	32/29	48.5/44	4mm QFN	EAR99

IQ MIXERS, Integrated Drive

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	Image Rej (dBc)	LO Drive (dBm)	Package	ECCN
MMIQA-0218HPSM	2-18	DC-3	7.5	28	0 to +8	7mm QFN	EAR99
MMIQA-0626HPSM	6-26	DC-6	9	30	-2 to +8	7mm QFN	EAR99
MMIQA-1035SPSM	10-35	DC-12	9	30	0 to +8	7mm QFN	EAR99
MMIQA-1040HPSM	10-40	DC-10	9	29	0 to +8	7mm QFN	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

MIXERS, Double Balanced

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	IIP3 (dBm)	LO Drive (dBm)	Package	ECCN
MM1-0115HPSM	1-15	DC-2.5	8	+21	+17	4mm QFN	EAR99
MM1-0212(L/H/S)SM	2-12	DC-3	8.5/8.5/9	+13/+25/+28	+9/+15/+20	4mm QFN	EAR99
MM1-0222(L/H)SM	2-22	DC-3.5	7/7.5	+11.5/+20	+11/+20	3mm QFN	EAR99
MM1-0312(H/S)SM	3-12	DC-4.5	7	+19/+24	+15/+20	3mm QFN	EAR99
MM1-0320HSM	3-20	DC-4	8	+20	+15	3mm QFN	EAR99
MM1-0424SSM	4.5-24	DC-4	8	+25	+20	3mm QFN	EAR99
MM1-0626(H/S)CSP2	6-26	DC-9	7/7.5	+20/+25	+15/+20	2.5mm CSP2	EAR99
MM1-0626(H/S)SM	6-26.5	DC-9	7.5/8	+21/+24.5	+15/+20	3mm QFN	EAR99
MM1-0726HSM	7-26.5	DC-9	7.5	+17	+20	3mm QFN	EAR99
MM1-0832(L/H)SM	8-32	DC-12	8.5/8	+11/+20.5	+9/+15	3mm QFN	EAR99
MM1-0832HPSM	8-32	DC-12	8	+23	+15	3mm QFN	EAR99
MM1-1040HPSM	10-40	DC-12	9	+20	+15	3mm QFN	EAR99
MM1-1130HSM	11-30	DC-12	7	+21	+15	3mm QFN	EAR99
MM1-1453(L/H)SM	14-53	DC-22	8/7.6	+13/+17	+13/+15	4mm QFN	EAR99
MM1-1850(H/S)SM	18-50	DC-21	8.7/9.7	+17/+28	+15/+20	4mm KFN	EAR99
MM1-1886HCSP2	18-86	DC-27	9	+20	+15	2.5mm CSP2	EAR99
MM1-2567LSM	25-67	DC-30	11	+9	+9	3mm QFN	EAR99

MIXERS, Triple Balanced

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	IIP3 (dBm)	LO Drive (dBm)	Package	ECCN
MT3-0113(L/H/S)CQG	1.5-13	0.01-7	7.5/7.5/8.5	+24/+30/+36	+15/+20/+27	CQG	EAR99
MT3D-0113LSM[1]	1.5-13	see plots	7.5	+27	+17	4mm QFN	EAR99
MT3L-0113HSM	1.5-13	0.25-5	8.5	+20	+31	4mm QFN	EAR99
MT3H-0113(L/H)SM	1.5-13	0.8-8.5	8	+22/+29	+15/+20	4mm QFN	EAR99
T3-18GLCTG(-1/-2)	0.01-18	0.001-10	7.5	+30	+20	CQG	EAR99
T3H-18GLCTG(-1/-2)	0.01-18	0.01-18	9.5	+30	+20	CQG	EAR99
T3-20GLCTG(-1/-2)	0.01-20	0.001-10	7.5	+30	+20	CQG	EAR99
T3H-20GLCTG(-1/-2)	0.01-20	0.01-18	9.5	+30	+20	CQG	EAR99
MT3D-0325HCSM[1]	3-25	DC-6	7.5	+25	+20	4mm QFN	EAR99
MM2D-0528SCSM[1]	5-28	DC-12	10	+31	+28	4mm QFN	EAR99
MM2-0530(L/H)SM	5-30	2-20	10/9	+19/+28	+15/+20	4mm QFN	EAR99
✦ MM2-0432HPSM(-1*/-2*)	4-32	2-8	6	+22	+18	3mm QFN	EAR99
✦ MM2-0843HPSM(-1*/-2*)	8-43	1-15	7	+24	+18	3mm QFN	EAR99

[1]Differential IF

***New Release since 4/2026**

All electrical specifications given are typical values.

MIXERS, Integrated Drive

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	IIP3 (dBm)	LO Drive (dBm)	Package	ECCN
MT3A-0113HCSM	1.5-13	0.5-8.5	9.5	+28	+5 to +15	6mm QFN	EAR99
MM1A-0222HPSM	2-22	DC-3.5	7.5	+17	+3 to +15	5mm QFN	EAR99
MM1A-0622HPSM	6-22	DC-9	7.5	+21	+3 to +15	5mm QFN	EAR99
MM2A-0530HPSM	5-30	2-22	8	+25	-3 to +3	7mm QFN	EAR99
MM1A-0832HPSM	8-32	DC-12	9	+24	-6 to +6	3x4.6mm QFN	EAR99
MM1A-1040HPSM	10-40	DC-12	10	+23	+3 to +9	3x4.6mm QFN	EAR99
MM1A-1855HPSM	18-55	DC-21	9	+20	+4 to +10	3x4.6mm QFN	EAR99

ACTIVE DOUBLER

Part Number	Input (GHz)	Output (GHz)	1F Supp (dBc)	3F Supp (dBc)	Bias (V & mA)	Package	ECCN
IADA-2050PSM	10-25	20-50	25	35	5V and -0.15V @ 233 mA	4mm QFN	EAR99

PASSIVE MULTIPLIERS and NON LINEAR TRANSMISSION LINES

Part Number	Type	Input (GHz)	Output (GHz)	Conversion Loss (dB)	1F Supp (dBc)	3F Supp (dBc)	Package	ECCN
MMD-0415HPSM	Doubler	2-7.5	4-15	27	27	38	3mm QFN	EAR99
MMD-0416LPSM	Doubler	2-8	4-16	12	37	50	2.29x3.86mm DFN	EAR99
MMD-1030(LC/H)SM	Doubler	5-15	10-30	12.5	31/34	43/46	3mm QFN	EAR99
MMD-2050(L/H)SM	Doubler	10-25	20-50	12.5	35/33	46/40	3mm QFN	EAR99
✦ MMD-0426LPSM*	Doubler	2-13	4-26	13	37	50	2.29x3.86mm DFN	EAR99
NLTL-6794SM	Comb Generator	0.1-1	0.1-30	–	–	–	6mm QFN	EAR99
NLTL-6796SM	Comb Generator	0.5-3.5	0.5-50	–	–	–	6mm QFN	EAR99
NLTL-6273SM	Comb Generator	0.7-5	0.7-24	–	–	–	5mm QFN	EAR99

POWER DIVIDERS 1:4

Part Number	Band (GHz)	Excess Loss (dB)	Amp Bal (dB)	Phase Bal (°)	Isolation (dB)	Type	Package	ECCN
MPD4-0R404CSP2	0.4-4	3.41	0.03	0.3	20	Wilkinson	2.5mm CSP2	EAR99
MPD4-0R504CSP2	0.5-4.5	1.4	0.04	0.4	16	Wilkinson	2.5mm CSP2	EAR99
MPD4-0108CSP2	1-8	1.4	0.08	0.4	30	Wilkinson	2.5mm CSP2	EAR99
MPD4-0218CSP3	2-18	0.8	0.15	2.2	29	Wilkinson	3.5mm CSP3	EAR99
MPD4-0422CSP2	4-22	1	0.1	0.5	30	Wilkinson	2.5mm CSP2	EAR99
MPD4-1260CSP2	12-60	1.1	0.25	1.9	29	Wilkinson	2.5mm CSP2	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

POWER DIVIDERS 1:2

Part Number	Band (GHz)	Excess Loss (dB)	Amp Bal (dB)	Phase Bal (°)	Isolation (dB)	Type	Package	ECCN
PBR-0003SMG	0.01-3	1.5	0.8	-	40	High Isolation	SMG	EAR99
PBR-0006SMG	0.01-6	1.7	0.8	-	35	High Isolation	SMG	EAR99
PBR-0012SMG	0.01-12	1.7	1	-	30	High Isolation	SMG	EAR99
MPD-0R402FCSP2	0.4-2.5	0.9	0.07	0.3	20	Wilkinson	2.5mm CSP2 Front Ports	EAR99
MPD-0R402SCSP2	0.4-2.5	1	0.05	0.3	20	Wilkinson	2.5mm CSP2 Side Ports	EAR99
MPD2-00001PSM	0.4-4	0.9	0.02	0.8	16	Wilkinson	1.3x2mm DFN	EAR99
MPD-0108FCSP2	1-8	0.8	0.11	0.3	23	Wilkinson	2.5mm CSP2 Front Ports	EAR99
MPD-0108SCSP2	1-8	0.9	0.1	0.8	23	Wilkinson	2.5mm CSP2 Side Ports	EAR99
MPBR-0022CSP3	DC-22	4.6	0.1	0.9	35	High Isolation	3.5mm CSP3	EAR99
MPBR-0122CSP3	1-22	2	0.1	0.7	31	High Isolation	3.5mm CSP3	EAR99
MPD-0222FCSP2	2-22	0.6	0.05	2.5	24	Wilkinson	2.5mm CSP2 Front Ports	EAR99
MPD-0222SCSP2	2-22	0.7	0.04	0.6	22	Wilkinson	2.5mm CSP2 Side Ports	EAR99
MPD-0226SM	2-26.5	1.5	0.2	2	20	Wilkinson	4mm QFN	EAR99
MPD-0422FCSP2	4-22	0.7	0.12	0.2	24	Wilkinson	2.5mm CSP2 Front Ports	EAR99
MPD-0422SCSP2	4-22	0.9	0.17	1.7	22	Wilkinson	2.5mm CSP2 Side Ports	EAR99
PD-0434SM	4-34	1.5	0.25	3	20	Wilkinson	SM	EAR99
PD-0535SM	5-35	1.5	0.25	3	18	Wilkinson	SM	EAR99
MPD-1260FCSP2	12-60	0.3	0.04	2.3	22	Wilkinson	2.5mm CSP2 Front Ports	EAR99
MPD-1260SCSP2	12-60	0.6	0.03	1.8	24	Wilkinson	2.5mm CSP2 Side Ports	EAR99
PD-0030SMG	DC-30	1	0.25	3	-	Resistive	SMG	EAR99
MPDR-0070CSP2	DC-70	1.5	0.25	5	-	Resistive	2.5mm CSP2	EAR99
MPDW-0670CSP2	6-70	1	0.1	1	24	Wilkinson	2.5mm CSP2	EAR99

SWITCHES

Part Number	Band (GHz)	Insertion Loss (dB)	Isolation (dB)	IIP3 (dB)	Package	ECCN
MSW2-1002HLGA	0.1-20	0.8	44	54	2.25mm LGA	EAR99
MSW2-1001ELGA	0.1-40	0.7	43	50	2.25mm LGA	EAR99

***New Release since 4/2026**

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BARE DIE

AMPLIFIERS, Driver

Part Number	Band (GHz)	Gain (dB)	Psat (dBm)	OIP3 (dBm)	Voltage (V)	Current (mA)	ECCN
APM-7099CH[1]	0.01-20	14	+25	+24	+5 to +9 VC and +5 to +9 VB	72	EAR99
APM-7098CH[1]	0.1-22	14	+23	+24	+5 to +9 VC and +5 to +9 VB	44	EAR99
APM-7516CH[1]	1-22	12	+23	+33	+5 VC and +5 VB	106	EAR99
ADM-9027CH	2-24	16	-	+25	+2 to +3 VB and +5 to +7 VD	60	EAR99
ADM-5931CH	DC-28	11	+18	+27	+3 to +7 VD and -0.3 to 0 VG	85	EAR99
✦ AMM-11561CH*	0.01-30	15.7	+27	+33	+12 VD and -0.25 VG	220	EAR99
APM-6849CH[1]	2-30	11	+21	+21	+3 to +6 VC and +3 to +6 VB	21	EAR99
ADM-5974CH	DC-35	14	+22	+27	+3 to +7 VD and -0.3 to 0 VG	150	3A001.b.2.d
AMM-7199ACH	11-38	20	+20	+31	+2.5 to +3 VD and -0.6 to -0.4 VG	130	3A001.b.2.d
✦ AMM-11078CH*	0.01-40	17.5	+24	+32.5	+7 VD and -0.25 VG	220	3A001.b.2.d
ADM-8007CH	2 - 40	23	+23	+33	+3.5 to +4 VG1, +4 to +5 VG2, +4 to +5 VD2, +5 to +6 VD1	185	3A001.b.2.d
AMM-7200ACH	12-46	18	+20.5	+29	+2.5 to +3 VD and -0.6 to -0.4 VG	150	3A001.b.2.d
✦ AMM-11059CH*	0.01-50	12	+25	+35	+12 VD and -0.4 VG	225	3A001.b.2.f
AMM-6702CH	21-55	25	+19	-	+2 to +3 VD and -0.6 to -0.4 VG	180	3A001.b.2.d
AMM-7210ACH	22-57	14.5	+20	+28	+2.5 to +3 VD and -0.6 to -0.4 VG	150	3A001.b.2.d
AMM-7203CH	30-60	11.5	+16	+21	+1.5 to +3 VD and -0.6 to -0.4 VG	80	3A001.b.2.d
AMM-9025CH	0.0001-65	14	-	+26	+6V	65	3A001.b.2.d
AMM-9024CH	DC-70	11.5	+14	-	+5 VD and -0.25 VG	45	3A001.b.2.d
AMM-9893CH	45-95	18	18	-	+5 VD and -1.5 to -0.2 VG	350	3A001.b.2.h

[1]Low Phase Noise

AMPLIFIERS, Gain Block and Low Noise

Part Number	Band (GHz)	Gain (dB)	NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Voltage (V)	Current (mA)	ECCN
ADM-8096CH	0.09 - 6	22	1.5	+21	+33	+5 VD	58	EAR99
ADM-8095CH	0.09-10	18	1.2	+18	+30	+5 VD	39	EAR99
AKA-1300D	DC-14	13	5	+14	+28	+3.8 VD	50	EAR99
AKA-1310D	DC-14	13	5	+14	+28	+4.6 VD	50	EAR99
AKA-1400D	DC-14	17	4	+15	+28	+3.8 VD	50	EAR99
AKA-1500D	DC-14	19	4	+16	+28	+4.2 VD	50	EAR99
ADM-8558CH	DC-20	16	1.8	+14	+23	+6 VD, +3 VG	50	EAR99
ADM-8556CH	6-20	24	1.3	+16	+27	+3 VD, +3VB	67	EAR99
ADM-9181CH	DC-26	14.5	3.4	+22	+31	+3 VB / +5 VD	130	EAR99

***New Release since 4/2026**

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ATTENUATORS

Part Number	Band (GHz)	Attenuation (dB)	Return Loss (dB)	Note	ECCN
ATN03-0040CH	DC-40	3	25	Positive Slope	EAR99
ATN06-0040CH	DC-40	6	23	Positive Slope	EAR99
ATN10-0040CH	DC-40	10	23	Positive Slope	EAR99
ATN15-0040CH	DC-40	15	27	Positive Slope	EAR99
ATN20-0040CH	DC-40	20	27	Positive Slope	EAR99
ATN00-0067CH	DC-67	0	33	-	EAR99
ATN01-0067CH	DC-67	1	33	-	EAR99
ATN02-0067CH	DC-67	2	35	-	EAR99
ATN03-0067CH	DC-67	3	37	-	EAR99
ATN04-0067CH	DC-67	4	36	-	EAR99
ATN05-0067CH	DC-67	5	37	-	EAR99
ATN06-0067CH	DC-67	6	38	-	EAR99
ATN07-0067CH	DC-67	7	44	-	EAR99
ATN08-0067CH	DC-67	8	42	-	EAR99
ATN09-0067CH	DC-67	9	38	-	EAR99
ATN10-0067CH	DC-67	10	38	-	EAR99
ATN13-0067CH	DC-67	13	32	-	EAR99
ATN15-0067CH	DC-67	15	34	-	EAR99
ATN17-0067CH	DC-67	17	30	-	EAR99
ATN20-0067CH	DC-67	20	35	-	EAR99
ATN00-00110CH	DC-110	0	32	-	EAR99
ATN01-00110CH	DC-110	1	33	-	EAR99
ATN02-00110CH	DC-110	2	34	-	EAR99
ATN03-00110CH	DC-110	3	33	-	EAR99
ATN04-00110CH	DC-110	4	33	-	EAR99
ATN05-00110CH	DC-110	5	32	-	EAR99
ATN06-00110CH	DC-110	6	32	-	EAR99
ATN07-00110CH	DC-110	7	39	-	EAR99
ATN08-00110CH	DC-110	8	39	-	EAR99
ATN09-00110CH	DC-110	9	30	-	EAR99
ATN10-00110CH	DC-110	10	30	-	EAR99
ATN13-00110CH	DC-110	13	25	-	EAR99
ATN15-00110CH	DC-110	15	26	-	EAR99
ATN17-00110CH	DC-110	17	29	-	EAR99
ATN20-00110CH	DC-110	20	23	-	EAR99

BALUNS, Passive

Part Number	Band (GHz)	Amp Bal (dB)	Phase Bal (°)	Isolation (dB)	Impedance Ratio	Total Insertion Loss as a Mode Converter (dB)	ECCN
MBAL-1440CH	14-40	0.2	1.1	13	2:1	3	EAR99

***New Release since 4/2026**

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COUPLERS, Pick-Off Tees

Part Number	Band (GHz)	Insertion Loss (dB)	Pick-Off Loss (dB)	ECCN
PT-0067CH	DC-67	1.1	15	EAR99

COUPLERS, Hybrid

Part Number	Band (GHz)	Amp Bal (dB)	Phase Bal (°)	Isolation (dB)	ECCN
MQH-0207CH	2-7	0.5	1	25	EAR99
MQH-2R58R5CH	2.5-8.5	0.4	3	23	EAR99
MQS-0209CH	2-9	0.5	3	16	EAR99
MQH-3R510CH	3.5-10	0.4	1.5	25	EAR99
MQH-0517CH	5-17	0.5	5	23	EAR99
MQS-0218CH	2-18	1	3	17	EAR99
MQS-0418CH	4-18	0.4	0.5	16	EAR99
MQH-0920CH	9-20	0.55	2	22	EAR99
MQH-1434CH	14-34	0.7	4.5	17	EAR99
MQH-1842CH	18-42	1.5	4	15	EAR99

DIPLEXERS

Part Number	Passband Low (GHz)	Passband High (GHz)	Isolation (dB)	ECCN
MDPX-0305CH	DC-3	5-26.5	47	EAR99
MDPX-0407CH	DC-4	7-26.5	38	EAR99
MDPX-0609CH	DC-6	9-26.5	58	EAR99
MDPX-0710CH	DC-7	7-26.5	45	EAR99
MDPX-00001CH[1]	DC-15.4	17.4-20.3	77	EAR99
MDPX-2330CH	DC-23	30-60	36	EAR99
MDPX-2734CH	DC-27	34-60	38	EAR99
MDPX-00002CH	DC-35	43.3-59.9	44	EAR99

[1]Duplexer

EQUALIZERS, Positive Gain Slope

Part Number	Band (GHz)	Low Freq Attenuation (dB)	Typ Return Loss (dB)	ECCN
MEQX-7ACH	DC-7	3, 6, 10 & 12	29, 29, 27, 29	EAR99
MEQX-14ACH	DC-14	3, 6 & 10	23, 22, 23	EAR99
MEQX-20ACH	DC-20	3, 5, 6, 7, 10 & 11	21, 22, 21, 23, 25, 23	EAR99
MEQX-30ACH	DC-30	3, 6 & 10	20, 20, 20	EAR99
MEQX-60ACH	DC-60	3, 6 & 10	15, 15, 15	EAR99
MEQX-70ACH	DC-70	0, 4, 6, 8 & 10	31, 31, 33, 29, 25	EAR99

FIXED FILTERS, Reflectionless

Part Number	1dBc Passband (GHz)	3dBc Passband (GHz)	30dBc Rejection Point (GHz)	Passband Return Loss (dB)	Stopband Return Loss (dB)	ECCN
MFQH-00001CH	18.52-21.27	18.25-21.6	17.11-22.41	25	12	EAR99

***New Release since 4/2026**

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FIXED FILTERS, Lowpass

Part Number	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	Passband Return Loss (dB)	ECCN
MFLP-00007CH	1.6	2.0	2.4	26	EAR99
MFLP-00008CH	2.5	3.2	3.9	23	EAR99
MFLP-00009CH	3.4	4.2	5.1	27	EAR99
MFLP-00001CH	4.8	6.1	7.0	21	EAR99
MFLP-00026CH	5.0	6.3	7.2	27	EAR99
MFLP-00002CH	7.45	9.26	11.01	26	EAR99
MFLP-00028CH	8.2	10.7	12.4	27	EAR99
MFLP-00003CH	10.3	12.0	14.7	20	EAR99
MFLP-00029CH	11.0	12.8	14.8	34	EAR99
MFLP-00006CH	11.3	12.9	15.1	24	EAR99
MFLP-00030CH	12.4	14.6	16.6	26	EAR99
MFLP-00004CH	13.0	15.0	18.5	24	EAR99
MFLP-00032CH	14.6	17.0	19.4	33	EAR99
MFLP-00033CH	15.4	18.9	21.0	28	EAR99
MFLP-00005CH	16.0	18.1	21.1	23	EAR99
MFLP-00034CH	17.0	20.8	22.8	33	EAR99
MFLP-00035CH	18.4	22.5	24.8	33	EAR99
MFLP-00036CH	19.4	24.4	26.7	33	EAR99
MFLP-00041CH	19.9	25.5	28.2	34	EAR99
MFLP-00037CH	21.1	26.7	29.4	31	EAR99
MFLP-00038CH	23.2	29.0	31.7	33	EAR99
MFLP-00039CH	24.4	30.3	33.4	32	EAR99
MFLP-00040CH	25.8	32.4	35.8	32	EAR99

FIXED FILTERS, Highpass

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Passband Return Loss (dB)	ECCN
MFHP-00025CH*	1.3	2.0	2.6	27	EAR99
MFHP-00001CH	1.4	2.0	2.5	20	EAR99
MFHP-00026CH*	2.5	4.0	4.5	27	EAR99
MFHP-00027CH*	5.1	5.9	6.7	27	EAR99
MFHP-00028CH*	6.3	7.9	8.6	28	EAR99
MFHP-00029CH*	8.2	9.7	10.6	26	EAR99
MFHP-00002CH	8.3	9.9	10.9	13	EAR99
MFHP-00030CH*	10.2	11.3	12.7	28	EAR99
MFHP-00031CH*	11.3	13.0	14.8	27	EAR99
MFHP-00003CH	13.6	15.2	16.6	9	EAR99
MFHP-00032CH*	14.3	15.5	16.7	23	EAR99
MFHP-00033CH*	16.0	17.6	19.3	26	EAR99
MFHP-00035CH*	17.6	19.8	20.9	26	EAR99
MFHP-00036CH*	19.3	21.5	23.1	23	EAR99
MFHP-00037CH*	20.9	23.7	25.3	30	EAR99
MFHP-00038CH*	23.1	25.3	27.5	26	EAR99
MFHP-00039CH*	24.8	27.5	29.2	21	EAR99
MFHP-00040CH*	26.4	29.2	31.4	23	EAR99
MFHP-00041CH*	28.6	31.4	33.6	21	EAR99

FIXED FILTERS, Bandpass

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @ fc (dB)	ECCN
MFBP-00116CH	1.0	1.3	1.4	1.7	2.1	2.2	2.6	2.9	EAR99
MFBP-00117CH	2.0	2.4	2.6	3.1	3.8	4.2	4.6	2.5	EAR99
MFBP-00040CH	1.0	1.4	1.6	3.3	6.8	7.5	8.5	1.0	EAR99
MFBP-00112CH	1.5	2.0	2.2	3.5	5.5	6.0	6.7	1.6	EAR99
MFBP-00001CH	3.8	4.6	4.7	5.4	6.1	6.3	7.3	1.3	EAR99
MFBP-00002CH	5.0	5.8	5.9	6.6	7.4	7.6	8.6	1.5	EAR99
MFBP-00084CH	5.4	5.9	6.0	7.4	9.1	9.9	10.5	2.4	EAR99
MFBP-00079CH	7.2	7.8	8.0	8.9	10.0	10.2	10.7	2.2	EAR99
MFBP-00113CH	7.9	8.4	8.5	9.2	9.9	10.1	10.5	2.8	EAR99
MFBP-00151CH	7.0	7.7	7.8	9.6	11.9	12.6	13.2	1.9	EAR99
MFBP-00137CH	7.0	7.4	7.7	9.9	12.9	13.8	14.8	2.0	EAR99
MFBP-00041CH	4.0	4.7	5.3	10.1	19.2	20.6	23.3	1.1	EAR99
MFBA-00004CH	7.2	8.0	8.5	10.2	12.2	12.5	13.8	1.9	EAR99
MFB-1100CH	7.0	8.9	9.4	10.8	12.4	12.9	16.3	1.4	EAR99
MFBP-00080CH	9.1	9.8	10.0	10.9	12.0	12.2	12.7	2.2	EAR99
MFBP-00085CH	8.0	8.7	8.9	11.0	13.7	15.1	16.0	2.2	EAR99
MFBP-00114CH	9.3	9.8	10.1	11.7	13.5	14.1	14.6	2.0	EAR99
MFBA-00003CH	8.8	9.8	10.2	12.0	14.1	14.4	15.5	2.1	EAR99
MFBP-00026CH	9.2	9.8	10.1	12.2	14.7	15.1	16.1	1.2	EAR99
MFBP-00081CH	11.2	11.8	12.0	12.9	13.9	14.2	14.8	2.4	EAR99
MFBP-00054CH	9.7	10.9	11.1	13.7	17.0	17.5	19.1	1.4	EAR99
MFBP-00152CH	10.8	11.7	11.9	13.7	15.9	16.2	17.4	1.6	EAR99
MFBP-00138CH	9.7	10.3	11.1	13.9	17.5	18.5	19.7	1.6	EAR99
MFBP-00043CH	10.8	11.8	12.1	14.9	18.2	18.6	20.6	1.4	EAR99
MFBP-00082CH	13.4	13.8	14.1	15.0	16.0	16.3	16.8	2.4	EAR99
MFBP-00086CH	11.5	12.2	12.6	15.0	17.9	18.5	19.2	1.6	EAR99
MFB-1600CH	9.4	11.7	12.1	15.1	18.9	19.8	24.6	1.2	EAR99
MFBB-00001CH	14.0	14.5	14.7	15.1	15.6	15.8	16.6	2.6	EAR99
MFBP-00115CH	13.1	13.7	14.1	15.8	17.6	18.1	18.6	2.2	EAR99
MFBA-00001CH	12.7	13.8	14.1	15.9	17.9	18.2	19.0	2.4	EAR99
MFBP-00025CH	12.0	12.9	13.2	16.0	19.4	19.9	21.3	1.2	EAR99
MFBP-00048CH	12.5	15.0	15.2	16.2	17.3	17.6	18.3	2.0	EAR99
MFBP-00083CH	15.3	15.8	16.1	17.0	17.9	18.3	18.7	2.5	EAR99
MFBP-00153CH	14.3	15.6	15.8	17.7	19.9	20.3	21.3	2.0	EAR99
MFBP-00052CH	13.0	14.4	14.7	18.6	23.6	24.3	26.9	1.4	EAR99
MFBP-00053CH	14.1	15.6	15.8	18.9	22.7	23.1	25.1	1.4	EAR99
MFB-2025CH	12.7	16.1	16.8	20.3	24.5	25.6	31.3	1.4	EAR99
MFBP-00044CH	16.0	17.5	17.9	20.9	24.5	24.9	26.9	1.5	EAR99
MFBP-00070CH	16.0	17.1	17.5	21.3	25.8	26.6	27.9	1.5	EAR99
MFBB-00002CH	19.0	20.0	20.3	21.7	23.1	23.4	26.2	1.6	EAR99
MFBA-00002CH	16.2	17.8	18.2	21.7	25.9	26.4	28.2	1.8	EAR99
MFBP-00154CH	18.3	19.5	19.8	21.7	23.8	24.2	25.4	2.2	EAR99
MFB-2500CH	9.7	15.8	16.4	21.8	28.8	32.0	33.8	1.3	EAR99
MFBP-00024CH	16.8	17.8	18.8	22.0	25.8	67.0	28.8	1.4	EAR99

FIXED FILTERS, Bandpass (cont.)

Part Number	F30dBc Low (GHz)	F3dBc Low (GHz)	F1dBc Low (GHz)	Fc (GHz)	F1dBc High (GHz)	F3dBc High (GHz)	F30dBc High (GHz)	IL @ fc (dB)	ECCN
MFBP-00089CH	16.4	17.6	17.9	22.2	27.5	28.6	30.2	1.6	EAR99
MFBP-00068CH	16.0	17.4	17.7	22.6	28.8	29.9	31.9	1.4	EAR99
MFB-2400CH	11.4	18.6	19.4	22.9	27.0	28.0	30.0	1.5	EAR99
MFBP-00100CH	19.9	21.0	21.5	25.3	29.8	30.7	32.2	1.7	EAR99
MFBP-00134CH	20.2	21.2	21.9	25.4	29.5	30.2	31.7	1.9	EAR99
MFB-2625CH	16.9	20.8	21.8	25.7	30.3	31.7	38.9	1.4	EAR99
MFBP-00042CH	14.8	17.2	17.7	26.3	38.9	41.7	46.4	1.8	EAR99
MFBP-00045CH	22.3	23.4	24.1	26.3	28.7	29.4	30.6	2.0	EAR99
MFBP-00056CH	18.9	21.5	21.9	27.0	33.4	34.2	38.5	1.3	EAR99
MFBP-00055CH	20.0	21.9	22.3	27.2	33.2	33.8	37.1	1.3	EAR99
MFBP-00023CH	22.9	24.2	25.2	28.9	33.1	33.6	35.6	1.5	EAR99
MFBP-00071CH	23.8	25.2	25.6	29.2	33.4	34.3	35.7	1.4	EAR99
MFB-3450CH	14.6	22.5	23.3	30.5	40.0	44.9	48.1	1.1	EAR99
MFBP-00101CH	25.7	26.8	27.6	30.7	34.2	34.9	36.4	2.1	EAR99
MFBP-00135CH	26.1	27.2	27.9	30.7	33.8	34.4	35.8	2.5	EAR99
MFB-3175CH	22.0	25.8	26.8	31.3	36.5	37.9	45.9	1.5	EAR99
MFBP-00118CH	23.2	25.2	25.7	31.4	38.5	40.1	43.6	1.5	EAR99
MFBP-00046CH	26.1	27.7	28.3	31.7	35.5	36.5	38.1	1.7	EAR99
MFB-3300CH	18.4	25.4	26.3	32.2	39.4	40.8	45.1	1.3	EAR99
✦ **MFBP-00184CH***	23.4	25.7	26.2	32.2	39.6	41.1	45.1	1.2	EAR99
MFB-3325CH	27.1	31.7	32.2	33.2	34.2	34.7	38.7	2.3	EAR99
MFBP-00072CH	29.1	30.2	30.7	33.3	36.1	36.8	38.0	1.8	EAR99
MFBP-00069CH	25.7	27.3	28.2	33.5	39.9	40.9	43.0	1.7	EAR99
MFB-3475CH	23.3	28.7	29.7	34.2	39.5	40.7	48.8	2.0	EAR99
MFBP-00087CH	27.7	29.3	29.8	34.4	39.7	40.8	42.8	1.6	EAR99
MFBP-00050CH	32.4	33.4	33.8	34.8	35.9	36.3	36.9	2.9	EAR99
MFBP-00136CH	30.2	31.6	32.0	35.4	39.1	40.1	41.7	1.8	EAR99
MFBP-00102CH	30.2	31.6	32.0	35.5	39.3	40.6	42.6	1.9	EAR99
MFBP-00073CH	32.3	33.8	34.1	35.7	37.3	37.8	38.7	2.6	EAR99
MFBP-00022CH	28.3	30.1	31.2	35.8	41.0	41.8	44.1	1.6	EAR99
MFBP-00047CH	32.8	34.0	34.4	37.3	40.2	41.1	42.4	2.1	EAR99
MFBP-00119CH	30.4	32.1	32.5	37.4	43.1	44.6	46.8	1.7	EAR99
MFBP-00057CH	27.1	30.0	30.5	37.5	46.2	47.2	51.3	1.5	EAR99
MFBP-00075CH	34.6	36.0	36.4	38.1	39.8	40.4	41.3	2.5	EAR99
MFBP-00051CH	34.9	36.4	36.8	38.4	40.0	40.7	41.5	2.5	EAR99
MFBC-00017CH	31.9	34.1	35.4	41.2	48.9	49.9	52.5	1.5	EAR99
MFBC-00008CH	29.4	36.4	37.2	43.3	50.4	52.1	54.7	1.7	EAR99
MFBP-00103CH	42.3	43.4	44.1	47.5	51.2	52.0	53.4	2.7	EAR99
MFB-5350CH	20.3	33.5	35.3	48.6	67.0	48.6	48.6	0.8	EAR99
✦ **MFBP-00178CH***	45.1	46.2	46.9	49.4	52.0	53.0	54.3	2.4	EAR99
MFBC-00018CH	40.8	43.6	45.4	52.6	61.3	63.2	52.6	1.9	EAR99
MFBC-00009CH	40.4	46.1	46.9	54.1	62.4	64.7	-	2.3	EAR99
MFBC-00019CH	53.6	57.3	59.1	67.9	78.1	83.3	86.6	2.7	EAR99
MFBC-00020CH	63.1	76.5	78.5	90.0	103.3	90.0	90.0	3.9	EAR99

LIMITERS

Part Number	Band (GHz)	Loss (dB)	Flat Leakage (dBm)	Average Power Handling (W)	Peak Power Handling (W)	P1dB (dBm)	ECCN
HLM-100001CH*[1]	DC-10	0.8	+8.5@10GHz	10	—	+11	EAR99
HLM-8011CH[1]	DC-30	0.4	+7@30GHz	1	4.5	+10	EAR99
HLM-40CH[1]	DC-40	0.5	+16@20GHz	4	20	+15	EAR99
HLM-70CH[1]	DC-70	0.8	+9@40GHz	4	20	+9	EAR99

[1]Power ratings are dependent on frequency, temperature, and pulse conditions

IQ MIXERS

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	Image Rej (dBc)	L-R Isolation (dB)	ECCN
MMIQ-0218(L/H)CH	2-18	DC-3	8/7.5	27/35	58/53	EAR99
MMIQ-0416(L/H)CH	4-16	DC-6	9	28/29	58/59	EAR99
MMIQ-0520(L/H)CH	5-20	DC-6	9	35	46	EAR99
MMIQ-0626(L/H)CH	6-26	DC-6	9	35	41	EAR99
MMIQ-1037HCH	10-37	DC-12	9	25	47	EAR99
MMIQ-1040(L/S)CH	10-40	DC-12	9	25	47/44	EAR99
MMIQ-1865(L/H/S)CH	18-65	DC-23	9	35	49/48/50	EAR99
MMIQ-40100(L/H)CH	40-100	DC-20	10	30	see datasheet	EAR99
MMIQ-30120HCH[1]	30-120	DC-30	8.5	27	40	EAR99

[1]Differential IF IQ Mixer

MIXERS, Double Balanced

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	IIP3 (dBm)	LO Drive (dBm)	ECCN
MM1-0115HCH	1-15	DC-2.5	7.5	+21	+17	EAR99
MM1-0212(L/H/S)CH	2-12	DC-3	8/8.5/8.5	+13/+23/+26	+9/+15/+20	EAR99
MM1-0222(L/H)CH	2-22	DC-3.5	8.5	+12/+20	+9/+15	EAR99
MM1-0312(H/S)CH	3-12	DC-4.5	7.5	+19/+24	+15/+20	EAR99
MM1-0320(L/H)CH	3-20	DC-4	8	+10/+20	+7/+15	EAR99
MM1-0330(H/T)CH	3-30	DC-5	7/9	+21/+32	+19/+23	EAR99
MM1-0424SCH	4.5-24	DC-4	8	+25	+20	EAR99
MM1-0626(H/S)CH	6-26.5	DC-9	7.5/8	+21/+25	+15/+20	EAR99
MM1-0832(L/H)CH	8-32	DC-12	8/7.5	+14/+23	+9/+15	EAR99
MM1-1044(L/H)CH	10-44	DC-14	7.5	+13/+22	+9/+15	EAR99
MM1-1140HCH	11-40	DC-12	8	+21	+15	EAR99
MM1-1240SCH	12-40	DC-12	8	+25	+20	EAR99
MM1-1467(L/H)CH	14-67	DC-21	7	+12/+18	+13/+15	EAR99
MM1-1850(H/S)CH	18-50	DC-20	8/8.5	+21/+25	+15/+20	EAR99
MM1-1857(L/H)CH	18-57	DC-21	8/7.5	+13/+20	+9/+13	EAR99
MM1-2567LCH	25-67	DC-30	9	+9	+13	EAR99
MM1-1886LCH	18-86	DC-20	8.5	+15.5	+14	EAR99
MM1-30100LCH	30-100	DC-20	8.5	see datasheet	+14	EAR99
MM1-35130HCH	35-130	DC-50	8	see datasheet	+12	EAR99
MMH-35120HCH[1]	35-120, 12-40	DC-14	18	+7	+15	3A001.b.7.c.1

[1]Harmonic Mixer

MIXERS, Triple Balanced

Part Number	RF/LO (GHz)	IF (GHz)	Conversion Loss (dB)	IIP3 (dBm)	LO Drive (dBm)	ECCN
MM2-0530(L/H)CH	5-30	2-20	10/9	+19/+28	+15/+20	EAR99
MT3A-0113HCH[1]	1-13	0.5-8.5	8.5	+28	+8	EAR99
MT3L-0113HCH	1.5-13	0.25-5	8.5	+31	+20	EAR99
MT3H-0113(L/H)CH	1.5-13	0.8-8.5	8/8.5	+20/+28	+15/+20	EAR99

[1]Integrated low phase noise driver amplifier

ACTIVE DOUBLER

Part Number	Input (GHz)	Output (GHz)	1F Supp (dBc)	3F Supp (dBc)	Bias (V & mA)	ECCN
IADA-2050CH	10-25	20-50	24	21	5V @ 233 mA	EAR99

PASSIVE MULTIPLIERS and NON LINEAR TRANSMISSION LINES

Part Number	Type	Input (GHz)	Output (GHz)	Conversion Loss (dB)	1F Supp (dBc)	3F Supp (dBc)	ECCN
MMD-0415HCH	Doubler	2-7.5	4-15	11	27	36	EAR99
MMD-1030(L/H)CH	Doubler	5-15	10-30	12.5/11.5	38/41	46/47	EAR99
MMD-1648LCH	Doubler	8-24	16-48	15	44	69	EAR99
MMD-1250HCH	Doubler	6-25	12-50	11	32	40	EAR99
MMD-2060(L/H)CH	Doubler	10-30	20-60	11/10.5	37/38	41/40	EAR99
MMD-3580LCH	Doubler	17.5-40	35-80	11	38	44	EAR99
MMD-20100HCH	Doubler	10-50	20-100	10	24.5	33	3A001.b.7.b.1
MMD-40120HCH	Doubler	20-60	40-120	10	30	40	3A001.b.7.b.1
✦ MMD-18100(L*/H*)CH	Doubler	9-50	18-100	12.5/12	24/25	33/35	EAR99
MMQ-40125HCH	Quadrupler	10-31.25	40-125	20	19	12	3A001.b.7.b.1
NLTL-6273CH	Comb Generator	0.7-5	0.7-40	–	–	–	EAR99
NLTL-6275CH	Comb Generator	3-15	3-85	–	–	–	EAR99

POWER DIVIDERS 1:2

Part Number	Band (GHz)	Amp Bal (dB)	Phase Bal (°)	Excess Insertion Loss (dB)	Isolation (dB)	Type	ECCN
MPD-0R502CH	0.5-2	0.02	0.1	1.1	20	Wilkinson	EAR99
MPD-0226CH	2-26.5	0.2	2	1	20	Wilkinson	EAR99

SWITCHES

Part Number	Band (GHz)	Insertion Loss (dB)	Isolation (dB)	IIP3 (dBm)	ECCN
MSW2-00001CH	2-26	0.8	52	41	EAR99
MSW2-00002CH	4-50	1	48	41	EAR99
MSW2-00003CH	6-67	1.3	48	41	EAR99
MSW2-00004CH	9-100	1.5	50	41	EAR99

***New Release since 4/2026**

All electrical specifications given are typical values.

MARKI MICROWAVE PART NUMBER DECODER RING

Example: MT3H-0113LCQG-2

Prefix=MT3H, Identifier=0113, Diode=L, Package=CQG, Suffix=-2

PREFIX

1 to 4 letters to identify the product category (**BAL**=balun, **PD**=power divider, etc)

- MMICs: M prefix (ex: **M**BAL, **M**M1, **M**T3)
- Modifiers: ex: MT3**A** Integrated LO Driver Amplifier
- EVAL, EVB: evaluation boards of SMT components (ex: **EVAL**-MM1-0212H)

IDENTIFIER

Most part numbers include a 4-digit string that identifies start/stop frequencies (ex: **0416** = 4 to 16 GHz), with a few exceptions:

- Exceptions: amplifiers and NLTLs have the chip number instead of frequency band

DIODE

Found on mixers, IQ mixers and multipliers. LO Drive is given at typical value.

- **L** diode: Vf=0.25V, LO Drive +5 to +15 dBm
- **H** diode: Vf=0.75V, LO Drive +11 to +20 dBm
- **S** diode: Vf=1.4V, LO Drive +17 to +23 dBm
- **T** diode: Vf=2V, LO Drive +20 to +27 dBm

PACKAGES

- MMIC SMTs: **SM** (surface mount), **PSM** (plastic substrate), **CSM** (ceramic substrate), **CSP1, CSP2, CSP3** (chip scale package), **LGA** (land grid array) or **CH** (chip/bare die)
- Hybrid surface mounts: **CTG**, **CQG**, **SM**, **SMG**, **SLG**, **SSG**, etc
- SOI Switches: **LGA** (land grid array)
- Evaluation boards: **EVAL**, **EVB**

LAYOUT CONFIGURATION

- Mixers are generally offered in **-2** layout, but some are offered in a mirrored layout **-1** (ex: MM1-1467LCH**-1** and MM1-1467LCH**-2**)

MARKI MICROWAVE

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