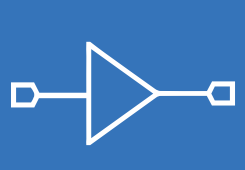
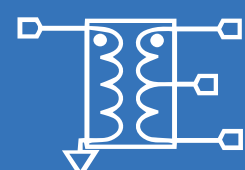
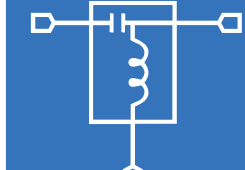
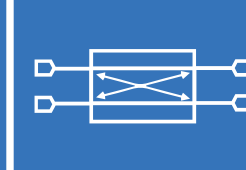
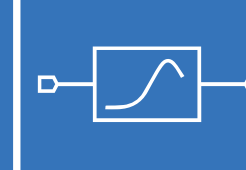
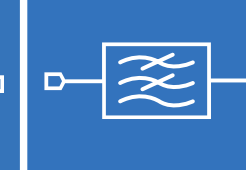
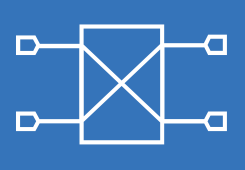
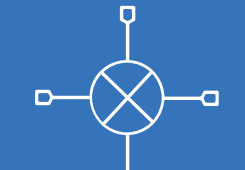
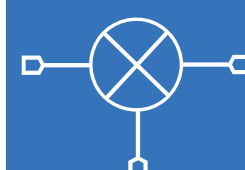
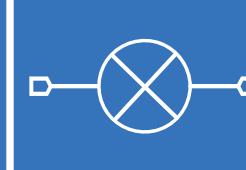
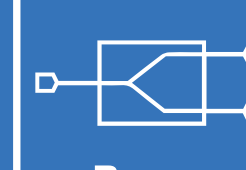
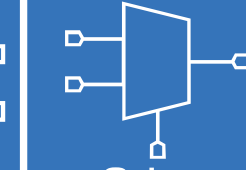


5G & mmWave

 <p>Amplifiers</p>	 <p>Baluns</p>	 <p>Bias Tees</p>	 <p>Couplers</p>	 <p>Equalizers</p>	 <p>Filters</p>
 <p>Hybrids</p>	 <p>IQ Mixers</p>	 <p>Mixers</p>	 <p>Multipliers</p>	 <p>Power Dividers</p>	 <p>Other Products</p>

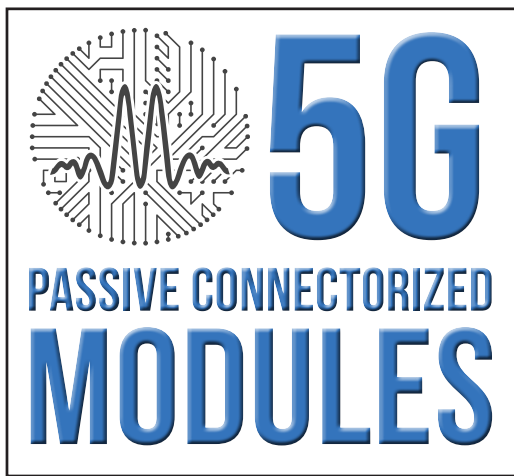
At Marki Microwave we design our components to achieve the highest performance over extremely wide bandwidths. We have an extensive catalog of bare die, surface mount, and coaxial-connectorized solutions up to 85GHz to support all of your millimeter-wave design and testing needs.

5G: The 28 & 39GHz bands of today, and emerging bands of tomorrow

60GHz Band: 5G, point-to-point, WiGig (802.11ad, 802.11ay), industrial sensors

Sub-6GHz: Visit www.markimicrowave.com for a large selection of components for sub-6GHz applications, including wider bandwidths to support harmonic testing.

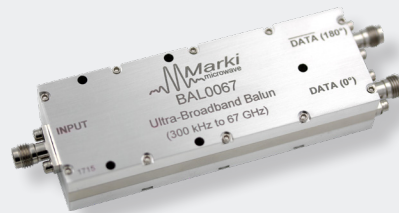
Choose from our ultra-wideband test & measurement products below or our GaAs MMIC products on the following page.



5G
PASSIVE CONNECTORIZED
MODULES

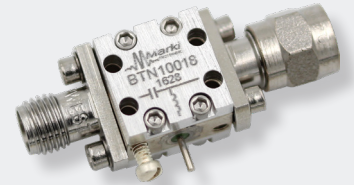
SINGLE-ENDED TO DIFFERENTIAL BALUNS (180° SPLITTERS)

- BAL-0036, DC-36GHz
- BAL-0050, DC-50GHz
- BAL-0067, DC-67GHz



BIAS TEES

- BTN-0040, DC-40GHz, 0.5A, 30V
- BTN1-0040, DC-40GHz, 1A, 50V
- BTN2-0040, DC-40GHz, 2A, 50V
- BTN-0050, DC-50GHz, 0.5A, 30V
- BTN1-0050, DC-50GHz, 1A, 50V
- BTN2-0050, DC-50GHz, 2A, 50V
- BTN-0065, DC-65GHz, 0.5A, 30V



COUPLERS, STRIPLINE DIRECTIONAL

- C13-0140, 1-40GHz, 13dB Coupling
- C20-0240, 2-40GHz, 20dB Coupling
- C13-0150, 1-50GHz, 13dB Coupling
- C10-0450, 4-50GHz, 10dB Coupling
- C10-0667, 6-67GHz, 10dB Coupling
- C16-0667, 6-67GHz, 16dB Coupling
- C20-0667, 6-67GHz, 20dB Coupling

COUPLERS, LOW LOSS HIGH POWER

- CA-40, DC-40GHz, 0.5dB Loss, 20W CW
- CA-50, DC-50GHz, 0.5dB Loss, 15W CW

QUADRATURE HYBRID (90°) COUPLERS

- QH-0440, 4-40GHz, 3dB Coupling
- QH-0550, 5-50GHz, 3dB Coupling
- QH-0867, 8-67GHz, 3dB Coupling



POWER DIVIDERS, WILKINSON 1:2

- PD-0140, 1-40GHz
- PD-0440, 4-40GHz, Low Loss
- PD-0150, 1-50GHz
- PD-0450, 4-50GHz, Low Loss
- PD-0165, 1-65GHz
- PD-0465, 4-65GHz, Low Loss

POWER DIVIDERS, WILKINSON 1:4

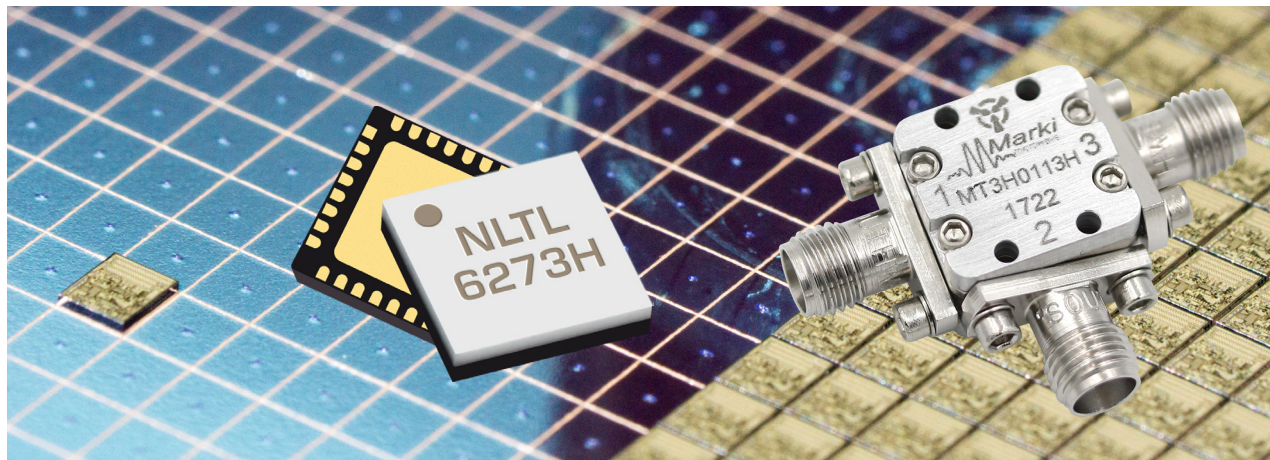
- PD4-0140, 1-40GHz
- PD4-0150, 1-50GHz

POWER DIVIDERS, RESISTIVE 1:2

- PD-0040, DC-40GHz

CONTACT THE FACTORY FOR ROHS (LEAD-FREE) MODULES

All MMIC products are RoHS.



MMIC Amplifiers	Band (GHz)	Gain (dB)	Psat (dB)	Bias	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
ADM-5931	DC-28	11	18	7V, 85mA	•					•	
ADM-5974	DC-35	14	22	7V, 160mA	•					•	
APM-6848	2-30	23/22	21/20	5V, 46mA	•				•	•	•
APM-6849	2-30	11	21	5V, 23mA	•				•	•	•
AMM-6702	20-55	28	21	3.5V, 180mA	•	•	•		•	•	•
ADM2-0035PA	0.1-35	23	23	7V, 320mA	•						•

MMIC Balun	Band (GHz)	Amplitude Bal (dB)	Phase Bal (degrees)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MBAL-1440CH	14-40	0.2	1.1	•	•				•	
MBAL-1445SM	14-45	0.2	2	•	•			•		

MMIC Equalizers	Band (GHz)	Low Freq Atten (dB)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MEQX-30A	DC-30	3, 6 & 10	•					•	•
MEQX-60A	DC-60	3, 6 & 10	•	•	•	•		•	•

MMIC Filters	Band (GHz)	Insertion Loss (dB)	Description	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MFB-2500	18-32	1.5	Bandpass Filter	•					•	
MFB-3175	26.6-36.7	1.5	Bandpass Filter	•	•				•	
MFB-3300	26-40	1.5	Bandpass Filter	•	•				•	
MFB-3450	24-45	1.5	Bandpass Filter	•	•				•	
MFB-3475	29.5-40	2.0	Bandpass Filter		•				•	
MFB-5350	38-67	1.2	Bandpass Filter		•	•	•		•	
MDPX-2330	DC-60	0.8	DC-23, 30-60 Diplexer		•	•	•		•	
MDPX-2734	DC-60	0.9	DC-27, 34-60 Diplexer		•	•	•		•	

MMIC Quad Hybrids	Band (GHz)	Amplitude Balance (dB)	Phase Balance (°)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MQH-1434	14-34	±0.7	±4.5	•					•	
MQH-1842	18-42	±1.5	±4	•	•				•	

MMIC Limiter	Band (GHz)	Peak Power CW (dBm)	Peak Power Pulsed (W)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
HLM-40	DC-40	4	20	•	•				•	•

MMIC Mixers	RF/LO (GHz)	IF (GHz)	IIP3 (dBm)	LO Drive (dBm)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MM2-0530L/H (SM)	5-30	2-20	+19/+28	+15/+20	•				•	•	•
MM1-0832L/H (SM)	8-32	DC-12	+14/+23	+9/+15	•				•	•	•
MM1-1044L/H	10-44	DC-14	+13/+22	+9/+15	•	•				•	•
MM1-1140H	11-40	DC-12	+21	+15	•	•				•	•
MM1-1130HSM	11-30	DC-12	+21	+15	•				•		
MM1-1240S	12-40	DC-12	+25	+20	•	•				•	•
MM1-1453HSM	14-53	DC-22	+16.5	+15	•	•	•		•		
MM1-1467L/H	14-67	DC-21	+12/+17.5	+13/+15	•	•	•	•		•	•
MM1-1850H/S	18-50	DC-20	+21/+25	+15/+20	•	•	•			•	•
MM1-1850HSM/SSM	18-50	DC-21	+17/+28	+15/+20	•	•	•		•		
MM1-1857L/H	18-57	DC-21	+13/+20	+9/+13	•	•	•			•	•
MM1-2567L (SM)	25-67	DC-20	+9	+13	•	•	•	•	•	•	•

MMIC IQ Mixers	RF/LO (GHz)	IF (GHz)	Image Rej (dBc)	L-R Isolation (dB)	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MMIQ-1037H	10-37	DC-12	25	47	•					•	•
MMIQ-1040L	10-40	DC-12	25	47	•	•				•	•
MMIQ-1865L/H	18-65	DC-23	35	49/48	•	•	•	•		•	•
MMIQ-4067L	40-67	DC-20	35	33		•	•	•		•	•

MMIC Multipliers	Input (GHz)	Output (GHz)	Description	28GHz	39GHz	47GHz	60GHz	SMT	Die	Module
MMD-1030H/HSM	5-15	10-30	Microwave & mmWave Passive Doublers with Excellent Suppression	•				•	•	•
MMD-1648L	8-24	16-48		•	•	•			•	•
MMD-2050LSM/HSM	10-25	20-50		•	•	•		•		
MMD-2060L/H	10-30	20-60		•	•	•	•		•	•
MMD-3567L	17.5-33.5	35-67			•	•	•		•	•
MMD-3580L	17.5-40	35-80				•	•	•		•
ADA-1030	5-15	10-30	Active mmWave Doubler	•						•
ADA-2052	10-25	20-52		•	•	•				•
AQA-2156	5.25-14	21-56		•	•	•				•
NLTL-6273 (SM)	0.7-5	0.7-40	Low Phase Noise Comb Generator	•	•			•	•	•
NLTL-6274SM	0.1-1	0.1-30		•				•		
NLTL-6275	3-15	3-85		•	•	•	•		•	•
NLTL-6276SM	0.5-3.5	0.5-50		•	•	•		•		

Marki Microwave is proud to provide world-class support including direct access to engineers, downloadable non-linear models for ADS and Microwave Office, and evaluation modules for our MMIC bare die and QFN products.

Online Tech Support:

- Extensive Knowledge Base with Tech Notes
- Application Notes
- Detailed Technical Primers
- Spur Calculator & Return Loss Calculator

