



## **Broadband mmW & THz CHIP LIST**

宽带毫米波太赫兹芯片系列

——BY CHIP FUNCTION 按芯片功能分类

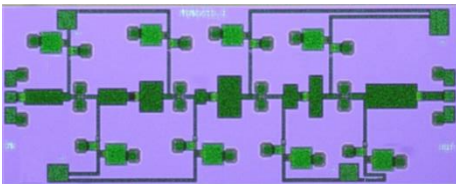
**VERSION:20231101FUNCTIONLIST**

➤ **Key Feature特点:**

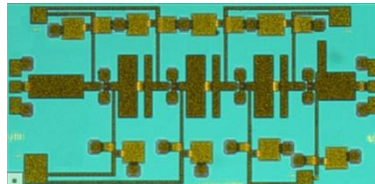
1. Made in China 中国制造
2. Chip or Packaged module available 可提供芯片或者模块
3. Datasheet on request 可提供产品说明书
4. No free samples 没有免费的样品
5. Customized Chip on request 可按需定制芯片

➤ **Product Picture产品图**

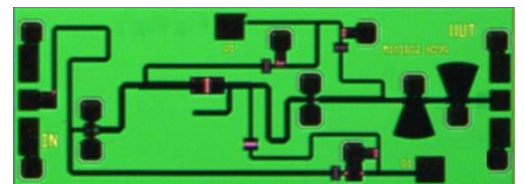
PA Chip功放芯片



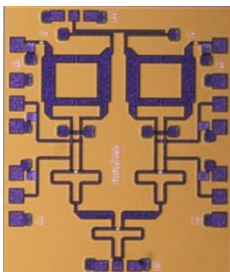
LNA Chip低噪放



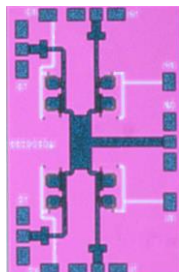
AMC Chip倍频器芯片



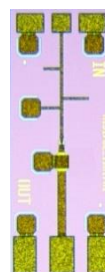
Mixer Chip混频器芯片



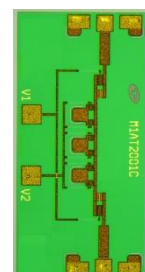
Switch Chip开关芯片



Detector Chip检波器芯片



Attenuator Chip衰减器芯片



## 1. PA Chip 功率放大器芯片

PN 产品号	Freq(GHz) 工作频率 (GHz)	Specs 技术指标
NEW MKR-045PA	DC-45	1.III/IV Materials 2.Small signal gain : 16dB 3.P <sub>sat</sub> :24dBm 4.P <sub>1dB</sub> :22dBm
NEW MKR-050PA	DC-50	1.III/IV Materials 2.Small signal gain : 12dB 3.P <sub>sat</sub> :18dBm 4.P <sub>1dB</sub> :16dBm
NEW MKR-067PA	DC-67	1.III/IV Materials 2.Small signal gain : 12dB 3.P <sub>sat</sub> :18dBm 4.P <sub>1dB</sub> :16dBm
MKR-075PA	DC-75	1.III/IV Materials 2.Small signal gain : 12dB 3.P <sub>sat</sub> :NA 4.P <sub>1dB</sub> :15dBm
MKR-0125PA	DC-125	1.III/IV Materials 2.Small signal gain : 10dB@DC~110GHz 3.P <sub>sat</sub> :12dBm@DC~70GHz 4.P <sub>1dB</sub> :10dBm@DC~70GHz
MKR-50PA	50-90	1.III/IV Materials 2.Small signal gain : 21dB 3.P <sub>sat</sub> :20dBm 4.P <sub>1dB</sub> :19dBm
MKR-60PA	60-87	1.III/IV Materials 2.Small signal gain : 23dB 3.P <sub>sat</sub> :29dBm 4.PAE:10%
MKR-75PA	75-110	1.III/IV Materials 2.Small signal gain : 15dB

		3.P <sub>sat</sub> :16dBm
		4.P <sub>1dB</sub> :15dBm

## 2. GaN PA Chip 氮化镓功率放大器芯片

PN 产品号	Freq(GHz) 工作频率	Psat (dBm) 饱和输出	Gain Typ (dB) 增益	Voltage(V) 工作电压	PAE(%) 效率	Type 类型
MKR-6090-P33	60-90	33.4	6.4	20	8	Pulse/CW
MKR-60110-P22	60-110	22	19	8	-	Pulse/CW
MKR-75110-P24	75-110	24.2	17	15	6.5	Pulse/CW
MKR-75110-P28	75-110	28.2	15	15	-	Pulse/CW
NEW MKR-75PA2	75-110	28	20	15	7	Pulse/CW
MKR-80130-P26	80-130	26	22	8	4.3	Pulse/CW
MKR-110170-P25	110-170	25	Under development, scheduled for release in Q3,2023			

### 3. LNA Chip低噪声放大器芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
MKR-47LNA2	47-75	1.III/IV Materials 2.Small signal gain: 20dB 3.NF:1.8dB 4.P <sub>1dB</sub> :0dBm
MKR-50LNA	50-75	1.III/IV Materials 2.Small signal gain: 21dB 3.NF:3dB 4.P <sub>1dB</sub> :7dBm
MKR-60LNA	60-90	1.III/IV Materials 2.Small signal gain: 21dB 3.NF:3.2dB 4.P <sub>1dB</sub> :10dBm
MKR-65LNA	65-110	1.III/IV Materials 2.Small signal gain: 20dB 3.NF:2.3dB 4.P <sub>1dB</sub> :0dBm
MKR-75LNA	75-110	1.III/IV Materials 2.Small signal gain: 22dB 3.NF:3.6dB 4.P <sub>1dB</sub> :0dBm
MKR-100LNA	100-160	1.III/IV Materials 2.Small signal gain: 20dB 3.NF:4.5dB 4.P <sub>1dB</sub> :0dBm
MKR-110LNA	110-170	1.III/IV Materials 2.Small signal gain: 18dB



		3.NF:3.5dB
		4.P <sub>1dB</sub> :0dBm
MKR-120LNA	120-200	1.III/IV Materials
		2.Small signal gain: 20dB
		3.NF:3.5dB
		4.P <sub>1dB</sub> :0dBm
MKR-210LNA	210-270	1.III/IV Materials
		2.Small signal gain: 20dB
		3.NF:6.5dB
		4.P <sub>1dB</sub> :NA

#### 4. Switch PIN/FET/SMT Chip开关芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
MKR-070SWS	DC-70	1.PIN Switch/SPST 2.S21:0.8dB 3.Isolation:30dB 4.S11:-15dB
MKR-070SWD	DC-70	1.PIN Switch/SPDT 2.S21:1.0dB 3.Isolation:30dB 4.S11:-18dB
MKR-070SW3	DC-70	1.PIN Switch/SP3T 2.S21:1.2dB 3.Isolation:30dB 4.S11:-15dB
MKR-070SW4	DC-70	1.PIN Switch/SP4T 2.S21:1.8dB 3.Isolation:25dB 4.S11:-18dB
MKR-70SWS	70-110	1.PIN Switch/SPST 2.S21:1.6dB 3.Isolation:26dB 4.S11:-15dB
MKR-70SWD	70-110	1.PIN Switch/SPDT 2.S21:2.5dB 3.Isolation:35dB 4.S11:-15dB
MKR-200SWS	200-260	1.FET Switch/SPST 2.S21:3dB 3.Isolation:30dB 4.S11:-15dB

## 5. Zero Bias Detector Chip 零偏置检波器芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
MKR-0110ZBD	DC-110	1.Sensitivity:600V/W
		2.Dynamic Range:-50 to -20dBm
		3.S11:-15dB
MKR-50ZBD	50-75	1.Sensitivity:4500V/W
		2.Dynamic Range:-50 to -20dBm
		3.S11:-10dB
MKR-70ZBD	70-130	1.Sensitivity:3000V/W
		2.Dynamic Range:-50 to -20dBm
		3.S11:-10dB
MKR-90ZBD	90-170	1.Sensitivity:2500V/W
		2.Dynamic Range:-50 to -20dBm
		3.S11:-10dB
MKR-210ZBD	210-320	1.Sensitivity:2000V/W
		2.Dynamic Range:-50 to -20dBm
		3.S11:-5dB



## 6. AMC Chip放大倍频链芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
NEW MKR-30AMC	30-53(x3)	1.Pin:15dBm
		2.Pout:-2dBm
		3.Harmonic:20dBc
MKR-50AMC	50-75(x2)	1.Pin:20dBm
		2.Pout:9dBm
		3.Harmonic:20dBc
NEW MKR-60AMC	60-90(x2)	1.Pin:16dBm
		2.Pout:4dBm
		3.Harmonic:30dBc
MKR-65AMC	65-150(x2)	1.Pin:15dBm
		2.Pout:4dBm
		3.Harmonic:NA
MKR-75AMC	75-110(x6)	1.Pin:16-19dBm
		2.Pout:7dBm
		3.Harmonic:20dBc
MKR-75AMC3	75-110(x3)	1.Pin:16dBm
		2.Pout:0dBm
		3. Conversion loss: 16dB
MKR-90AMC	90-170(x2)	1.Pin:15dBm
		2.Pout:4dBm
		3.Harmonic:NA
MKR-110AMC	110-170(x3)	1.Pin:15dBm
		2. Conversion loss:17dBm
		3.Harmonic:NA

## 7. Mixer Chip混频器芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
MKR-70MIX1	70-110	1. Fundamental Mixer 2. IF:DC-35GHz 3. Conversion Loss:14dB 4. LO Power:8dBm
MKR-70MIX2	70-110	1. Fundamental Mixer 2. IF:DC-35GHz 3. Conversion Loss:12dB 4. LO Power:13dBm
MKR-75MIX	75-110	1. Fundamental Mixer 2. IF:DC-12GHz 3. Conversion Loss:9dB 4. LO Power:0dBm
MKR-75MIX8	75-110	1. Fundamental Mixer 2. IF:DC-12GHz 3. Conversion Loss:9dB 4. LO Power:8dBm
MKR-110MIX	110-170	1. 2 <sup>nd</sup> -Harmonic Mixer 2. IF:DC-10GHz 3. Conversion Loss:14dB 4. LO Power:13dBm
MKR-120MIX	120-160	1. 2 <sup>nd</sup> -Harmonic Mixer 2. IF:DC-12GHz 3. Conversion Loss:13dB 4. LO Power:13dBm

## 8. Attenuator chip 衰减器芯片

PN 产品序列号	Freq(GHz) 工作频率 (GHz)	Specs 性能指标
MKR-060ATT	DC~60	1. Voltage Variable Attenuator 2. Attenuation range:0dB~15dB 3. Insertion loss:3dB 4. VSWR of on / attenuation state: 1.5/2.5
MKR-50ATT	50-75	1. Voltage Variable Attenuator 2. Attenuation range:0dB~27dB 3. Insertion loss:1.4dB 4. VSWR of on / attenuation state: 1.5/1.5
MKR-70ATT	70-110	1. Voltage Variable Attenuator 2. Attenuation range:0dB~20dB 3. Insertion loss:1.4dB 4. VSWR of on / attenuation state: 1.3/1.5
MKR-70ATT9	70-110	1. Fixed Attenuator 2. Attenuation:2dB~9dB 3. VSWR_IN/OUT: 1.2/1.2
MKR-70ATT18	70-110	1. Fixed Attenuator 2. Attenuation:18dB 3. VSWR_IN/OUT: 1.2/1.2
MKR-70ATT35	70-110	1. Fixed Attenuator 2. Attenuation:35dB 3. VSWR_IN/OUT: 1.2/1.2
MKR-110ATT1	110-170	1. Voltage Variable Attenuator 2. Attenuation range:0dB~22dB 3. Insertion loss:2dB 4. VSWR of on / attenuation state: 2.0/1.5