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## 1. Mixer 混频器



### 1.1 SMT MMIC 表贴混频器

Model	RF/LO [GHz]		IF [GHz]		LO[dBm]		CL/dB	ISO L-R	IIP]	SMT	Die	Module
	Low	High	Low	High	Low	High						
ML1-0110SM	1.5	10	DC	2	+8	+20	7	38	+21	Y	N	Y
MM1-0212LSM	2	12	0	3	+1	+15	8.5	57	+13	Y	N	Y
MM1-0212HSM	2	12	0	3	+13	+17	8.5	57	+25	Y	N	Y
MM1-0212SSM	2	12	0	3	+17	+23	9	52	+28	Y	N	Y
MM1-0222LSM	2	22	0	3.5	+7	+15	7.5	50	+11	Y	N	Y
MM1-0222HSM	2	22	0	3.5	+12	+22	7.5	50	+22	Y	N	Y
MM1-0312HSM	3	12	DC	4.5	+12	+20	7	49	+19	Y	N	Y
MM1-0312SSM	3	12	DC	4.5	+17	+23	7	49	+24	Y	N	Y
MM1-0320HSM	3.5	20	DC	4	+12	+20	8	49	+20	Y	N	Y
MM1-0424SSM	4.5	24	DC	4	+17	+23	8	48	+25	Y	N	Y
MM1-0626HSM	6	26.5	DC	9	+13	+20	7.5	45	+21	Y	N	Y
MM1-0626SSM	6	26.5	DC	9	+17	+23	8	45	+24.5	Y	N	Y
MM1-0726HSM	7	26.5	DC	9	+15	+23	7.5	27	+17	Y	N	Y
MM1-0832LSM	8	32	DC	12	8	15	8.5	36	+11	Y	N	Y
MM1-0832HSM	8	32	DC	12	16	23	8.5	36	20.5	Y	N	Y
MM1-1130HSM	11	30	DC	12	+12	+20	7	40	+21	Y	N	Y
MM1-1850HSM	18	50	DC	21	+12	22	8.7	39	+17	Y	N	Y
MM1-1850SSM	18	50	DC	21	+20	28	8.7	39	28	Y	N	Y
MM1-2567LSM	25	67	DC	30	10	+16	11	40	9	Y	N	Y
MM2-0530LSM	5	30	2	20	+9	+17	9	40	+15	Y	N	Y
MM2-0530HSM	5	30	2	20	+16	+22	8	35	+21	Y	N	Y
MT3-0113LCQG	1.5	13	0.01	7	+11	+24	7.5	40	+24	Y	N	Y

Model	RF/LO [GHz]		IF [GHz]		LO[dBm]		CL/dB	ISO L-R	IIP]	SMT	Die	Module
	Low	High	Low	High	Low	High						
MT3-0113HCQG	1.5	13	0.01	7	+16	+24	7.5	40	+30	Y	N	Y
MT3-0113SCQG	1.5	13	0.8	8.5	+7	+15	7.5	42	+22	Y	N	Y
MT3L-0113HSM	1.5	13	0.01	7	+22	+30	7.5	40	+36	Y	N	Y
MT3H-0113LSM	1.5	13	0.8	8.5	+7	+15	8	42	+22	Y	N	Y
MT3H-0113HSM	1.5	13	0.8	8.5	+16	+24	8	37	+29	Y	N	Y

## 1.2 MMIC Die 裸芯片混频器



Model	RF/LO		IF [GHz]		LO Drive		CL [dB]	ISO L-R [dB]	IIP3 [dBm]	SMT	Die	Module
	Low	High	Low	High	Low	High						
MM1-0212L	2	12	DC	3	+1	+15	8	47	+12.5	N	Y	Y
MM1-0212H	2	12	DC	3	+13	+17	8.5	47	+23	N	Y	Y
MM1-0212S	2	12	DC	3	+17	+23	8.5	47	+26	N	Y	Y
MM1-0222L	2	22	DC	3.5	+7	+15	8	47	+11.5	N	Y	Y
MM1-0212H	2	22	DC	3.5	+11	+20	8.5	47	+20	N	Y	Y
MM1-0212S	2	12	DC	3	+17	+23	8.5	47	+26	N	Y	Y
MM1-0222H	2	22	DC	3.5	+11	+20	8.5	47	+26	N	Y	Y
MM1-0312H	3	12	DC	4.5	+13	+20	7.5	52	+19	N	Y	Y
MM1-0312S	3	12	DC	4.5	+18	+23	7.5	52	+24	N	Y	Y
MM1-0320L	3	20	DC	4	+5	+9	8	54	+10	N	Y	Y
MM1-0320H	3.5	20	DC	4	+12	+20	8	52	+20	N	Y	Y
MM1-0424S	4.5	24	DC	4	+17	+23	8	49	+25	N	Y	Y
MM1-0626H	6	26.5	DC	9	+13	+20	7.5	53	+21	N	Y	Y
MM1-0626S	6	26.5	DC	9	+17	+23	8	53	+25	N	Y	Y
MM1-0832L	8	32	DC	12	+7	+15	8	46	+13.5	N	Y	Y
MM1-0832H	8	32	DC	12	+11	+20	7.6	50	+13.5	N	Y	Y

Model	RF/LO		IF [GHz]		LO Drive		CL [dB]	ISO L-R		IIP3 [dBm]	SMT	Die	Module
	Low	High	Low	High	Low	High		[dB]	[dB]				
MM1-1044L	10	44	DC	14	+7	+15	7.6	47	+12.5	N	Y	Y	
MM1-1044H	10	44	DC	14	+11	+20	7.6	47	+22	N	Y	Y	
MM1-1140H	11	40	DC	12	+12	+20	8	47	+21	N	Y	Y	
MM1-1240S	12	40	DC	12	+18	+23	8	43	+25	N	Y	Y	
MM1-1467L	14	67	DC	21	+9	+13	7	53	+12	N	Y	Y	
MM1-1467H	14	67	DC	21	+11	+20	7	53	+17	N	Y	Y	
MM1-1850H	18	50	DC	20	+12	+20	8	43	+21	N	Y	Y	
MM1-1850S	18	50	DC	20	+17	+23	8.5	43	+25	N	Y	Y	
MM1-1857L	18	57	DC	21	+7	+15	8	35	+13	N	Y	Y	
MM1-1857H	18	57	DC	21	+13	+21	7.5	45	+20	N	Y	Y	
MM1-2567L	25	67	DC	30	+6	+16	9	33	+9	N	Y	Y	
MM2-0530L	5	30	2	20	+9	+17	9	44	+15	N	Y	Y	
MM2-0530H	5	30	2	20	+14	+20	8	35	+21	N	Y	Y	
MT3L-0113H	1.5	13	0.25	5	+15	+25	8.5	43	+31	N	Y	Y	
MT3H-0113L	1.5	13	0.8	8.5	+7	+15	8	43	+20	N	Y	Y	
MT3H-0113H	1.5	13	0.8	8.5	+16	+24	8.5	37	+28	N	Y	Y	

### 1.3 T3 高线性三平衡混频器



Model	RF/LO [GHz]		IF [GHz]		LO Drive		CL [dB]	ISO [dB]	IIP3 [dBm]	SMT	Die	Module
	Low	High	Low	High	Low	High						
MT3-0113LCQG	1.5	13	0.01	7	+11	+24	7.5	40	+24	Y	N	Y
MT3-0113HCQG	1.5	13	0.01	7	+16	+24	7.5	40	+30	Y	N	Y
MT3-0113SCQG	1.5	13	0.01	7	+22	+30	7.5	40	+36	Y	N	Y
MT3L-0113H	1.5	13	0.25	5	15	25	8.5	43	31	N	Y	Y
MT3L-0113HSM	1.5	13	0.25	5	15	25	8.5	39	31	N	Y	Y
MT3H-0113L	1.5	13	0.8	8.5	+7	+15	8	43	+20	N	Y	Y
MT3H-0113LSM	1.5	13	0.8	8.5	+7	+15	8	42	+22	Y	N	Y
MT3H-0113H	1.5	13	0.8	8.5	+16	+24	8.5	37	+28	N	Y	Y
MT3H-0113HSM	1.5	13	0.8	8.5	+16	+24	8	37	+29	Y	N	Y
T3-07	.001	7	.001	4	+15	+27	6.5	24	+32	Y	N	Y
T3-0838	8	38	.01	10	+13	+25	8.0	28	+25	N	N	Y
T3-1040	10	40	1	18	+13	+25	8.0	28	+25	N	N	Y
T3-12	.01	12	.001	4	+15	+27	7.5	24	+30	Y	N	Y
T3-18	.01	18	.001	10	+15	+27	7.5	25	+30	Y	N	Y
T3-20	.01	20	.001	10	+15	+27	7.5	24	+30	Y	N	Y
T3A-07PA	.01	7	.001	4	+10	+15	6.5	-	+27	N	N	Y
T3H-18	.01	18	.01	18	+15	+27	8.5	30	+30	Y	N	Y
T3H-20	.01	20	.01	18	+15	+27	8.5	30	+30	Y	N	Y



#### 1.4 Legacy 老型号新项目不推荐

Model	RF/LO GHz		IF [GHz]		LO Drive		CL [dB]	ISO L-R	ISO L-I	SMT	Dire	Module
	Low	High	Low	High	Low	High						
M1-0008	.01	8	DC	2	+10	+13	7.5	40	25	N	N	Y
M1-0012	.01	12	DC	2	+10	+12	7.5	35	25	N	N	Y
M1-0204	2	4	DC	2	+7	+22	5	38	20	N	N	Y
M1-0208	2	8	DC	2	+7	+22	6	38	20	N	N	Y
M1-0212	2	12	DC	2	+7	+22	6	35	20	N	N	Y
M1-0218	2	18	DC	2	+10	+19	7	35	25	N	N	Y
M1-0220	2	20	DC	2	+10	+19	7	35	25	N	N	Y
M1-0310	3	10	DC	3	+7	+22	6	40	40	N	N	Y
M1-0408	4	8	DC	4	+7	+22	5.5	35	25	N	N	Y
M1-0412	4	12	DC	4	+7	+22	5	40	30	N	N	Y
M1-0420	4	20	DC	4	+7	+22	6	35	30	N	N	Y
M1-0616	6	16	DC	4	+7	+22	5.5	35	30	N	N	Y
M1-0620	6	20	DC	6	+7	+22	5.5	40	20	N	N	Y
M1-0818	8	18	DC	4	+7	+22	6	35	30	N	N	Y
M1-1020	10	20	DC	4	+7	+22	6	35	30	N	N	Y
M1B-0618	6	18	DC	4	+7	+22	5.5	33	30	N	N	Y
M1R-0726	7	26.5	DC	8	+8	+17	6	38	25	N	N	Y
M2-0020	.5	20	.001	6	+13	+22	7.5	24	25	N	N	Y
M2-0026	.01	26.5	.001	6	+15	+18	8	30	30	N	N	Y
M2-0208	2	8	.001	6	+10	+22	7	20	30	N	N	Y
M2-0218	2	18	.001	6	+10	+22	7.5	25	27	N	N	Y
M2-0219	2	19	.001	6	+10	+22	7	25	25	N	N	Y
M2-0220	2	20	.001	6	+10	+22	7.5	27	27	N	N	Y
M2-0226	2	26.5	.001	6	+10	+16	7.5	28	28	N	N	Y

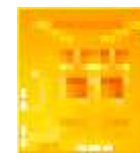
Model	RF/LO GHz		IF [GHz]		LO Drive		CL [dB]	ISO L-R	ISO L-I	SMT	Dire	Module
	Low	High	Low	High	Low	High						
M2-0240	2	40	.001	6	+15	+20	9	30	30	N	N	Y
M2-0243LPV	2	43	.4	43	+15	+20	10	30	25	N	N	Y
M2-0250LNVT	2	50	.4	50	+10	+20	10	25	25	N	N	Y
M2-0440	4	40	.5	20	+10	+20	10	25	25	N	N	Y
M2B-0218	3	18	1	12	+10	+22	7.5	30	23	N	N	Y
M2H-0220	2	20	1	10	+10	+22	7	27	27	N	N	Y
M2H-0226	2	26.5	1	10	+10	+16	7.5	28	27	N	N	Y
M4-0040	.5	40	DC	.4	+10	+19	8	28	30	N	N	Y
M4-0050	.5	50	DC	.3	+10	+19	9	27	27	N	N	Y
M4-0126	1	26.5	DC	.7	+10	+19	8.5	30	30	N	N	Y
M4-0140	1	40	DC	.7	+10	+19	8.5	30	27	N	N	Y
M4-0150	1	50	DC	.4	+10	+19	9	27	27	N	N	Y
M8-0326	3	26.5	DC	2	+7	+16	5.5	35	25	N	N	Y
M8-0412	4	12	DC	2	+7	+22	5	40	25	N	N	Y
M8-0420	4	20	DC	2	+7	+22	6	40	30	N	N	Y
M9-0444	4	44	DC	3	+9	+18	7.5	25	25	N	N	Y
M9-0942	9	42	1	22	+9	+18	9	25	25	N	N	Y

## 2. IQ Mixer 镜像抑制混频器



### 2.1 MMIC SMT 表贴 IQ 混频器

Model	RF/LO [GHz]		IF [MHz]		LO Drive [dBm]		CL [dB]	Image Rejection [dB]	ISO L-R [dB]	ISO L-I [dB]	SMT	Die	Module
	Low	High	Low	High	Low	High							
MMIQ-0205HSM	1.75	5	DC	2000	+14	+20	8	32	61	46	Y	N	Y
MMIQ-0218LSM	2	18	DC	3500	+14	+20	8	27	58	28	Y	N	Y
MMIQ-0218HSM	2	18	DC	3500	+18	+26	8	35	53	26	Y	N	Y
MMIQ-0416LSM	4	16	DC	6000	7	16	9	35	51	39	Y	N	Y
MMIQ-0416HSM	4	16	DC	6000	13	22	9	35	51	39	Y	N	Y
MMIQ-0520LSM	5	20	DC	6000	+3	+13	9	35	46	49	Y	N	Y
MMIQ-0520HSM	5	20	DC	6000	+13	+23	9	35	39	59	Y	N	Y
MMIQ-0626LSM	6	26	DC	6000	+11	+20	9	35	39	48	Y	N	Y
MMIQ-0626HSM	6	26	DC	6000	13	23	9	35	36	43	Y	N	Y



### 2.2 MMIC IQ Mixer 裸芯片和模块

Model	RF/LO [GHz]		IF [MHz]		LO Drive [dBm]		CL [dB]	Image Rejection [dB]	ISO L-R [dB]	ISO L-I [dB]	SMT	Die	Module
	Low	High	Low	High	Low	High							
MMIQ-0218L	2	18	DC	3500	+13	+18	8.5	29	45	25	N	Y	Y
MMIQ-0218H	2	18	DC	3500	+20	+26	8.5	35	53	25	N	Y	Y
MMIQ-0520L	5	20	DC	6000	+3	+13	9	35	46	49	N	Y	Y
MMIQ-0520H	5	20	DC	6000	+13	+23	9	35	46	49	N	Y	Y
MMIQ-0626L	6	26	DC	6000	+3	+13	9	35	41	50	N	Y	Y
MMIQ-0626H	6	26	DC	6000	+13	+23	9	35	41	50	N	Y	Y
MMIQ-1037H	10	37	DC	12000	+13	+23	9	25	47	48	N	Y	Y



Model	RF/LO [GHz]		IF [MHz]		LO Drive [dBm]		CL [dB]	Image Rejection [dB]	ISO L-R [dB]	ISO L-I [dB]	SMT	Die	Module
	Low	High	Low	High	Low	High							
MMIQ-1040L	10	40	DC	12000	+3	+13	9	25	47	48	N	Y	Y
MMIQ-1040S	10	40	DC	12000	+13	+25	9	25	47	48	N	Y	Y
MMIQ-1865L	18	65	DC	23000	+8	+17	9	25	47	48	N	Y	Y
MMIQ-1865H	18	65	DC	23000	+15	+21	9	25	47	48	N	Y	Y
MMIQ-1865S	18	65	DC	23000	+23	+27	9	25	47	48	N	Y	Y
MMIQ-4067L	40	67	DC	20000	+11	+15	9	35	33	40	N	N	Y

### 2.3 Legacy 老型号 IQ 混频器 (不推荐新设计)

Model	RF/LO [GHz]		IF [MHz]		LO Drive [dBm]		CL [dB]	Image Rejection [dB]	ISO L-R [dB]	ISO L-I [dB]	Surface Mount	Bare Die	Module
	Low	High	Low	High	Low	High							
IQ-0307	3	7	DC	500	+10	+16	5.5	23	30	20	N	N	Y
IQ-0618	6	18	DC	500	+10	+16	7.5	23	35	20	N	N	Y
IQ-1545	1.5	4.5	DC	500	+10	+16	5.5	25	43	30	N	N	Y
IQ-4509	4.5	9	DC	500	+10	+16	5.5	23	30	20	N	N	Y
IR-4509	4.5	9	50	90	+10	+16	5.5	23	30	25	N	N	Y
IRW-0618	6	18	4	210	+10	+16	7.5	23	35	25	N	N	Y
SSB-0618	6	18	4	210	+10	+16	7.5	23	35	25	N	N	Y

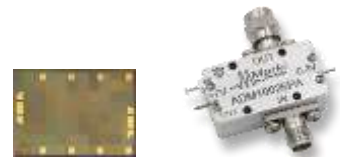
### 3. Amplifier 放大器

#### 3.1 LO Driver Surface Mounts 表贴放大器



Model	Low /GHz	High /GHz	Current [mA]	Saturated Power [dBm]	Gain [dB]	Surface Mount	Bare Die	Module
ADM-0026-5929SM	DC	26.5	165	20	13.5	Y	N	Y
ADM-0012-5931SM	DC	12	85	15	11	Y	N	Y
APM-6848SM	2	30	165	20	22	Y	N	Y
APM-6849SM	2	30	165	20	11	Y	N	Y
AMM-6702SM	20	50	180	18	24	Y	N	Y

#### 3.2 LO Driver Bare Die/Modules 裸芯片和模块放大器



Model	Low /GHz	High /GHz	Low Driver	High Driver	Saturated Power [dBm]	Gain [dB]	Surface Mount	Bare Die	Module
ADM-5931CH	DC	28	+3	+13	+18	11	N	Y	N
ADM-5974CH	DC	35	+6	+16	+22	14	N	Y	N
ADM1-0026PA	.005	26.5	+5	+15	+20	12	N	N	Y
ADM2-0035PA	.1	35	0	5	+23	23	N	N	Y
ADM3-0022PA	.01	26.5	+0	+10	+30	35	N	N	Y
APM-6848(注)	2	29	0	0	+21	21	N	Y	Y
APM-6849	2	29	0	0	+21	11	N	Y	Y

注：APM-6848, Low Phase Noise Amplifier, 低相位噪声放大器-165dBc/Hz at 10kHz

## 4. Frequency Multiplier 倍频器



### 4.1 Passive x2 无源两倍频器

Model	Input [GHz]		Output [GHz]		CL [dB]	Suppression F (dBc)	Supp 3F (dBc)	Surface	Die	Module
	Low	High	Low	High						
MLD-0416SM	2	8	4	16	12	40	40	Y	N	Y
MMD-1030H	5	15	10	30	12	41	51	N	Y	Y
MMD-1030HSM	5	15	10	30	12	34	46	Y	N	Y
MMD-1648L	8	24	16	48	15	44	69	N	Y	Y
MMD-2050LSM	10	25	20	50	12.5	35	41	Y	N	N
MMD-2050HSM	10	25	20	50	12.5	38	39	Y	N	N
MMD-2060L	10	30	20	60	11	37	41	N	Y	Y
MMD-2060H	10	30	20	60	10.5	38	39.5	N	Y	Y
MMD-3567L	17.5	33.5	35	67	11	38	44	N	N	Y
MMD-3580L	17.5	40	35	80	11	38	44	N	Y	Y



### 4.2 Active x2/x4 有源倍频器

Model	Fin Low	Fin High	Fout Low	Fout High	Drive Low	Dirve High	Output Level [dBm]	Typical Suppression [avg]	Surface Mount	Bare Die	Module
ADA-0416	2	8	4	16	0	6	16	28	N	N	Y
ADA-1030	5	15	10	30	0	6	16	30	N	N	Y
ADA-2052	10	26	20	52	-6	+2	+16	30	N	N	Y
AQA-2156	5.25	14	21	56	-2	+6	+21	30	N	N	Y
DAD-1840	4.5	10	18	40	9	+18	3	28	N	N	Y

### 4.3 NLTLs 梳妆谱发生器



Model	Input [GHz]		Output [GHz]		Drive Level [dBm]	Surface Mount	Bare Die	Module
	Low	High	Low	High				
NLTL-6273	0.7	5	0.7	40	20	N	Y	Y
NLTL-6273SM	0.7	5	0.7	24	20	Y	N	Y
NLTL-6275	3	15	3	85	20	N	Y	Y
NLTL-6294SM	0.1	1	0.1	30	20	Y	N	Y
NLTL-6296SM	0.5	3.5	0.5	50	20	Y	N	Y

### 4.4 Legacy 老产品新项目不推荐

Model	Input [GHz]		Output [GHz]		CL [dB]	F (dBc)	3F (dBc)	Surface Mount	Bare Die	Module
	Low	High	Low	High						
D-0250	1	25	2	50	12	15	-	N	N	Y
D-0265	1	32.5	2	65	13	15	-	N	N	Y
D-0308	3	8	6	16	9	25	30	N	N	Y
D-0365	1.5	32.5	3	65	12.5	15	-	N	N	Y
D-0515	5	15	10	30	10	20	30	N	N	Y
D-0840	4	20	8	40	10	15	25	N	N	Y
D-1505	1.5	5	3	10	10	25	30	N	N	Y
D-1550	7.5	25	15	50	12	20	20	N	N	Y

## 5. Balun 巴伦

### 5.1 Test and Measurement 同轴测试巴伦

Model	Low	High	Amplitude Balance [dB]	Phase Balance [Degrees]	Total Insertion Loss [dB]	CMR (dB)	Surface Mount	Bare Die	Module
BAL-0003	.0002	3	±0.05	±1	7	45	N	N	Y
BALH-0003	.0002	3	±0.1	±1	4.5	45	N	N	Y
BAL-0006	.0002	6	±0.05	±1	7.5	40	N	N	Y
BALH-0006	.0002	6	±0.1	±1	5.5	40	N	N	Y
BAL-0010	.0002	10	±0.2	±2	8	35	N	N	Y
BALH-0010	.0002	10	±0.2	±2	5.5	35	N	N	Y
BAL-0106	1.2	6	±0.1	±2	3.6	38	N	N	Y
BAL-0212	2.6	12	±0.1	±2	4	35	N	N	Y
BAL-0520	5	20	±0.2	±3	4.5	30	N	N	Y
BAL-0026	.0003	26.5	±0.5	±3	5.5	30	N	N	Y
BAL-0036	.0003	36	±0.5	±3	6	30	N	N	Y
BAL-0050	.0003	50	±0.7	±4	6	28	N	N	Y
BAL-0067	.0003	67	±0.7	±4	6	27	N	N	Y

### 5.2 Balun Chip 裸芯片巴伦

Model	Low	High	Amplitude Balance [dB]	Phase Balance [Degrees]	Total Insertion Loss [dB]	CMR (dB)	Surface Mount	Bare Die	Module
MBAL-1440CH	14	40	±0.2	±1.1	4.5	35	N	Y	N

### 5.3 Surface Mounts 表贴巴伦

Model	Low	High	Amplitude Balance [dB]	Phase Balance [Degrees]	Total Insertion Loss [dB]	CMR (dB)	Surface Mount	Bare Die	Module
BAL-0003SMG	.0005	3	±0.3	±3	6.8	35	Y	N	N
BALH-0003SMG	.0005	3	±0.2	±2	5	35	Y	N	N
BAL-0006SMG	.0005	6	±0.4	±3	7	30	Y	N	N
BALH-0006SMG	.0005	6	±0.2	±3	5	30	Y	N	N
BAL-0009SMG	.0005	9	±0.6	±5	7.5	26	Y	N	N
BALH-0009SMG	.0005	9	±0.8	±5	5.5	25	Y	N	N
MBAL-0104SM	1	4	±0	±2	5.5	33	Y	N	N
BAL-0208SMG	2	8	±0.3	±1	5.5	34	Y	N	N
BAL-0012SSG	0.01	12	±0.3	±3	5	26	Y	N	N
<b>BAL-0220SMG</b>	<b>2</b>	<b>20</b>	<b>±0.3</b>	<b>±1</b>	<b>5.5</b>	<b>34</b>	<b>Y</b>	<b>N</b>	<b>N</b>
BAL-0416SMG	4	16	±0.4	±1	6.3	35	Y	N	N
BAL-0620SMG	6	20	±0.2	±1	5.6	34	Y	N	N
MBAL-1445SM	14	45	±0.2	±2	7	34	Y	N	N

### 5.4 Inverters 反相器

Model	Low	High	Insertion Loss [dB]	Rise/Fall Time [ps]	Surface Mount	Bare Die	Module
INV-0026	.0002	26.5	2	13	N	N	Y
INV-0040	.0002	40	2.5	13	N	N	Y
INV-0065	.0002	65	5	12	N	N	Y

## 6. Bias Tee 偏置器

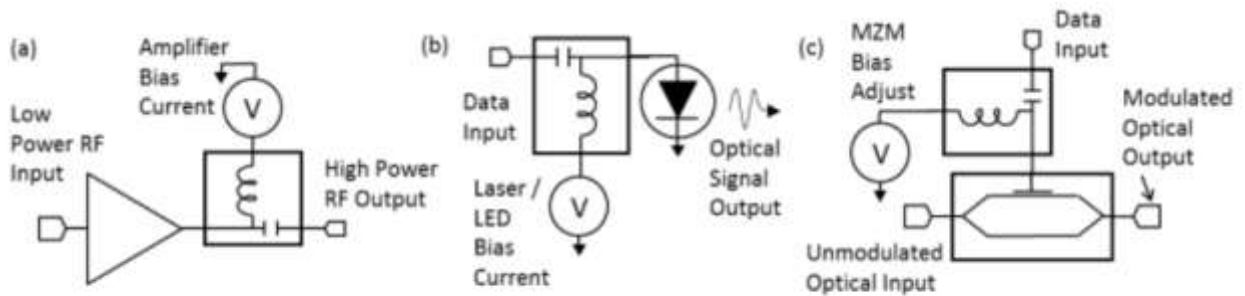


Fig. 1. Example Schematics of a) Broadband Microwave Amplifier Biasing, b) Laser/LED Biasing for Data Communication and c) Mach-Zender Modulator Biasing for Data Communication

图：偏置器的各种应用

### 6.1 Surface Mounts 表贴偏置器

Model	Low /GHz	High /GHz	Insertion Loss [dB]	DC Current [A]	DC Port ISO [dB]	DC Voltage [V]	Surface Mount	Bare Die	Module
BT-0010SMG	0.02	10	0.5	0.5	40	30	Y	N	N
BT-0014SMG	.0005	14	0.5	0.5	40	30	Y	N	N
BT-0024SMG	.0005	24	1	0.5	40	30	Y	N	N
BT-0030SMG	.02	30	1	0.5	40	30	Y	N	N
BT-0034SMG	.0005	34	1	0.5	40	30	Y	N	N

### 6.2 Modules 偏置器模块

Model	Low /GHz	High /GHz	Insertion Loss [dB]	DC Current [A]	DC Port ISO [dB]	DC Voltage [V]	Surface Mount	Bare Die	Module
BT-0018	.00004	18	0.6	0.5	35	30	N	N	Y
BT-0025	.00004	25	0.8	0.5	35	30	N	N	Y
BT-0026	.01	26.5	0.8	0.5	30	30	N	N	Y
BT-0040	.000004	40	1.5	0.5	30	30	N	N	Y
BTN-0040	.00004	40	1.5	0.5	30	30	N	N	Y
BT-0050	.000004	50	1.8	0.5	30	30	N	N	Y
BTN-0050	.00004	50	1.8	0.5	30	30	N	N	Y

Model	Low /GHz	High /GHz	Insertion Loss [dB]	DC Current [A]	DC Port ISO [dB]	DC Voltage [V]	Surface Mount	Bare Die	Module
BT-0065	.000004	65	1.8	0.5	30	30	N	N	Y
BTN-0065	.00004	65	2.0	0.5	25	30	N	N	Y

### 6.3 High Power 大功率偏置器模块

Model	Low /GHz	High /GHz	Insertion Loss [dB]	DC Current [A]	DC Port ISO [dB]	DC Voltage [V]	Surface Mount	Bare Die	Module
BTN1-0018	.0005	18	0.7	1	30	50	N	N	Y
BTN2-0018	.003	18	0.7	2	30	50	N	N	Y
BT1-0026	.00005	26.5	1	1	30	50	N	N	Y
BTN1-0026	.0005	26.5	1	1	30	50	N	N	Y
BT2-0026	.00001	26.5	1	2	30	50	N	N	Y
BTN2-0026	.003	26.5	1	2	30	50	N	N	Y
BT1-0040	.00005	40	1.5	1	30	50	N	N	Y
BTN1-0040	.0005	40	1.5	1	30	50	N	N	Y
BT2-0040	.0001	40	1.5	2	30	50	N	N	Y
BTN2-0040	.003	40	1.5	2	30	50	N	N	Y
BT1-0050	.00005	50	1.5	1	30	50	N	N	Y
BT2-0050	.0001	50	1.5	2	30	50	N	N	Y
BTN1-0050	.0005	50	1.5	1	30	50	N	N	Y
BTN2-0050	.003	50	1.5	2	30	50	N	N	Y



## 7. Coupler 耦合器

### 7.1 High Directivity Bridge 高隔离度

Model	Low	High	VSWR	Coupling [dB]	Directivity [dB]	Surface Mount	Bare Die	Module
CBR16-0003	.0002	3	1.1	16	40	N	N	Y
CBR16-0006	.0002	6	1.15	16	38	N	N	Y
CBR16-0012	.0002	12	1.25	16	32	N	N	Y
<b>CBR17-0026</b>	<b>.0002</b>	<b>26</b>	<b>1.22</b>	<b>17</b>	<b>23</b>	<b>N</b>	<b>N</b>	<b>Y</b>

### 7.2 Stripline Directional 带状线耦合器

Model	Low	High	VSWR	Coupling [dB]	Flatness [dB]	Directivity [dB]	Surface Mount	Bare Die	Module
C09-0R412	0.45	12	1.15	9	±0.7	22	N	N	Y
C09-0R418	0.45	18	1.15	9	±0.7	22	N	N	Y
C09-0R426	0.45	26.5	1.15	9	±0.7	22	N	N	Y
C09-0R430	0.45	30	1.15	9	±0.7	20	N	N	Y
C20-0R612	0.6	12	1.2	20	±0.6	22	N	N	Y
C10-0116	1	16	1.15	10	±0.5	20	N	N	Y
C20-0116	1	16	1.15	20	±0.6	20	N	N	Y
C20-0R518	0.5	18	1.2	20	±0.75	22	N	N	Y
C20-0R520	0.5	20	1.2	20	±0.75	22	N	N	Y
C13-0126	1	26.5	1.15	13	±0.6	20	N	N	Y
C16-1R718	1.7	18	1.15	16	±0.3	20	N	N	Y
C16-1R726	1.7	26.5	1.15	16	±0.4	20	N	N	Y
C10-0226	2	26.5	1.15	10	±0.6	22	N	N	Y
C20-0226	2	26.5	1.25	20	±0.75	22	N	N	Y
C13-0140	1	40	1.2	13	±1	16	N	N	Y

Model	Low	High	VSWR	Coupling [dB]	Flatness [dB]	Directivity [dB]	Surface Mount	Bare Die	Module
C20-0240	2	40	1.3	20	±0.75	17	N	N	Y
C13-0150	1	50	1.2	13	±0.75	16	N	N	Y
C10-0450	4	50	1.35	10	±0.5	15	N	N	Y
C10-0667	6	67	1.2	10	±0.8	17	N	N	Y
C16-0667	6	67	1.25	16	±0.9	17	N	N	Y
C20-0667	6	67	1.25	20	±0.8	17	N	N	Y

### 7.3 Low Loss High Power 低插损高功率耦合器

Model	Low /GHz	High /GHz	VSW R	Insertion Loss [dB]	Mean Coupling [dB]	Directivity [dB]	Average Power [W]	Surface Mount	Bare Die	Module
C17-0R506	0.5	6	1.2	0.4	17	20	120	N	N	Y
C17-0R512	0.5	12	1.2	0.65	17	20	80	N	N	Y
C17-0R518	0.5	18	1.2	1	17	20	60	N	N	Y
CA-18	DC	18	1.2	0.35	Datasheet	22	200	N	N	Y
CA-26	DC	26.5	1.1	0.35	Datasheet	24	50	N	N	Y
CA-40	DC	40	1.1	0.5	Datasheet	24	20	N	N	Y
CA-50	DC	50	1.1	0.5	Datasheet	24	15	N	N	Y
C-0250	2	50	1.25	0.7	12	15	-	N	N	Y
C-0265	2	65	1.25	0.7	12	15	-	N	N	Y

### 7.4 Dual Directional 双定向耦合器

Model	Low	High	VSWR	Coupling [dB]	Amplitude [dB]	Directivity [dB]	Surface Mount	Bare Die	Module
CD10-0106	0.7	6.3	1.14	10	±0.6	25	N	N	Y
CD10-0114	0.7	14.7	1.17	10	±0.6	23	N	N	Y

## 7.5 Pick-Off Tees

Model	Low	High	Insertion Loss [dB]	Pick-Off Loss [dB]	Surface Mount	Bare Die	Module
PT-0020	DC	20	2	16	N	N	Y
PT-0030	DC	30	2	16	N	N	Y

## 8. Hybrid 90 Degree 电桥

### 8.1 Hybrid Module 同轴电桥模块

Model	Low	High	Coupling [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	ISO [dB]	Surface Mount	Bare Die	Module
QH-0226	2	26.5	3	±0.25	±2	22	N	N	Y
QH-0440	4	40	3	±0.40	±5	18	N	N	Y
QH-0550	5	50	3	±0.6	±5	22	N	N	Y
QH-0867	8	67	3	±0.6	±6	18	N	N	Y
QH-0R71R3	0.65	1.3	3	±0.3	±3	16	N	N	Y
QH-0R518	0.5	18	3	±0.5	±3	16	N	N	Y
QH-0R714	0.7	14.5	3	±0.2	±2	22	N	N	Y

### 8.2 Hybrid Chips 裸芯片电桥

Model	Low	High	Coupling [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	ISO [dB]	Surface Mount	Bare Die	Module
MQS-0209	2	9	3	+/-1	+/-3	17	N	Y	Y
MQS-0218	2	18	3	+/-1	+/-3	17	N	Y	Y
MQH-2R58R5	2.5	8.5	3	+/-0.4	+/-3	23	N	Y	Y
MQH-3R510	3.5	10	3	+/-0.4	+/-1.5	25	N	Y	Y
MQS-0218SM	2	18	3	+/-0.4	+/-1.5	25	Y	N	Y

Model	Low	High	Coupling [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	ISO [dB]	Surface Mount	Bare Die	Module
MQS-0418	4	18	3	+/-0.4	+/-0.5	11	N	Y	Y
MQS-0517	5	17	3	+/-0.5	+/-6	23	N	Y	Y
MQS-0518SM	5	18	3	+/-0.4	+/-1.5	25	Y	N	Y
MQH-0920	9	20	3	±0.55	±2	21.5	N	Y	N
MQH-1434	14	34	3	±0.7	±4.5	17	N	Y	N
MQH-1842	18	42	3	±1.5	±4	15	N	Y	N

## Products

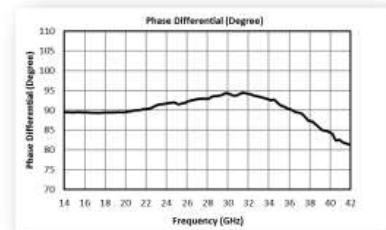
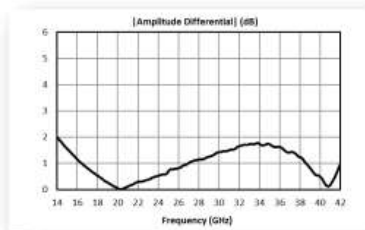
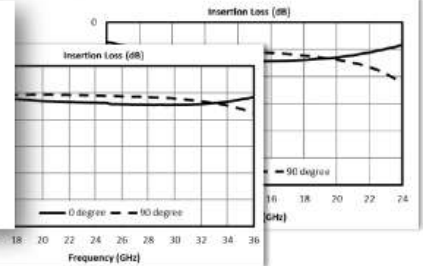
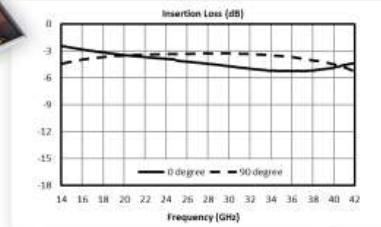
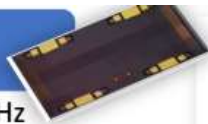
- MQH-0920, 9-20 GHz
- MQH-1434, 14-34 GHz
- MQH-1842, 18 -42 GHz

## Rollout

- May/June 2018

## Packaging

- Bare Die



**Exceptional Phase Balance & Repeatability**

## 9. Power Divider 功分器



### 9.1 High Directivity 高方向性功分器

Model	Low	High	Insertion Loss [dB]	Amplitude Balance [dB]	ISO [dB]	Surface Mount	Bare Die	Module
PBR-0003	.0003	3	1.25	±0.4	45	N	N	Y
PBR-0003SMG	.01	3	1.5	±0.8	40	Y	N	N
PBR-0006	.0003	6	1.5	±0.5	40	N	N	Y
PBR-0006SMG	.01	6	1.7	±0.8	35	Y	N	N
PBR-0012	.0003	12	1.5	±0.6	35	N	N	Y
<b>PBR-0012SMG</b>	<b>.01</b>	<b>12</b>	<b>1.7</b>	<b>±0.8</b>	<b>35</b>	<b>Y</b>	<b>N</b>	<b>N</b>

### 9.2 Wilkinson 1:2

Model	Low	High	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	ISO [dB]	Surface Mount	Bare Die	Module
PD-0R413	0.4	13.2	1.0	±0.05	±1	24	N	N	Y
PD-0R426	0.4	26	2.0	±0.05	±2	24	N	N	Y
PD-0R510	0.5	10	0.90	±0.1	±1	22	N	N	Y
PD-0R618	0.6	18	1.0	±0.05	±1	22	N	N	Y
PD-0R636	0.6	36	2.0	±0.1	±3	22	N	N	Y
PD-0109	1	9	0.75	±0.1	±1	22	N	N	Y
PD-0126	1	26.5	1.0	±0.1	±3	20	N	N	Y
PD-0140	1	40	1.5	±0.2	±2	20	N	N	Y
PD-0150	1	50	2.0	±0.25	±3	20	N	N	Y

Model	Low	High	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	ISO [dB]	Surface Mount	Bare Die	Module
PD-0165	1	65	5.0	±0.25	±3	20	N	N	Y
PD-0218	2	18	1.0	±0.2	±2	22	N	N	Y
<b>MPD-0226SM</b>	<b>2</b>	<b>26.5</b>	<b>3</b>	<b>±0.25</b>	<b>±3</b>	<b>20</b>	<b>Y</b>	<b>N</b>	<b>N</b>
PD-0220	2	20	1.0	±0.2	±2	22	N	N	Y
PD-0434SM	4	34	1.5	±0.25	±3	20	Y	N	N
PD-0426	4	26.5	0.8	±0.2	±2	18	N	N	Y
PD-0440	4	40	1.0	±0.2	±3	18	N	N	Y
PD-0450	4	50	1.2	±0.5	±5	18	N	N	Y
PD-0465	4	65	2	±0.5	±5	18	N	N	Y
PD-0530SMG	5	30	1.5	±0.1	±2	25	Y	N	N
PD-0535SM	5	35	1.5	±0.25	±3	18	Y	N	N

### 9.3 Wilkinson 1:3

Model	Low /GHz	High /GHz	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	Surface Mount	Bare Die	Module
PD3-0R412	0.4	12	1.5	±0.1	±2	N	N	Y
PD3-0R616	0.6	16	1.5	±0.1	±2	N	N	Y
PD3-0126	1.5	26.5	1.5	±0.3	±4	N	N	Y

### 9.4 Wilkinson 1:4

Model	Low /GHz	High /GHz	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	Surface Mount	Bare Die	Module
PD4-0R518	0.5	18	1.5	±0.25	±3	N	N	Y
PD4-0R526	0.5	26.5	2.5	±0.25	±3	N	N	Y
PD4-0R532	0.5	32	2.5	±0.3	±4	N	N	Y
PD4-0120	1	20	1.5	±0.25	±3	N	N	Y
PD4-0126	1	26.5	1.5	±0.3	±3	N	N	Y

Model	Low /GHz	High /GHz	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	Surface Mount	Bare Die	Module
PD4-0140	1	40	2.5	±0.4	±4	N	N	Y
PD4-0150	1	50	4	±0.5	±5	N	N	Y
PD4-0218	2	18	1.2	±0.2	±2	N	N	Y

## 9.5 Resistive 1:2

Model	Low	High	Insertion Loss [dB]	Amplitude Balance [dB]	Phase Balance [Degrees]	Surface Mount	Bare Die	Module
PD-0010	DC	10	0.25	±0.1	±1	N	N	Y
PD-0020	DC	20	0.5	±0.2	±2	N	N	Y
PD-0030	DC	30	0.5	±0.25	±2	N	N	Y
PD-0030SMG	DC	30	1.0	±0.25	±3	Y	N	N
PD-0040	DC	40	0.75	±0.25	±2	N	N	Y

## 10. Equalizer 均衡器

### 10.1 Surface Mounts 表贴均衡器

Model	Low /GHz	High /GHz	Loss at DC (dB)	Return Loss (dB)	Surface Mount	Bare Die	Module
MEQ3-7ASM	DC	7	3	29	Y	N	N
MEQ6-7ASM	DC	7	6	29	Y	N	N
MEQ10-7ASM	DC	7	10	27	Y	N	N
MEQ12-7ASM	DC	7	12.5	27	Y	N	N
MEQ3-14ASM	DC	14	3	23	Y	N	N
MEQ6-14ASM	DC	14	6	28	Y	N	N
MEQ10-14ASM	DC	14	10	29	Y	N	N
MEQ3-20ASM	DC	20	3	19	Y	N	N
MEQ5-20ASM	DC	20	5	22	Y	N	N

Model	Low /GHz	High /GHz	Loss at DC (dB)	Return Loss (dB)	Surface Mount	Bare Die	Module
MEQ6-20ASM	DC	20	6	23	Y	N	N
MEQ7-20ASM	DC	20	7.5	26	Y	N	N
MEQ10-20ASM	DC	20	10	20	Y	N	N
MEQ11-20ASM	DC	20	11	27	Y	N	N

### Products

MEQx-7ASM, DC to 7GHz  
MEQx-14ASM, DC to 14GHz  
MEQx-20ASM, DC to 20GHz

### Performance

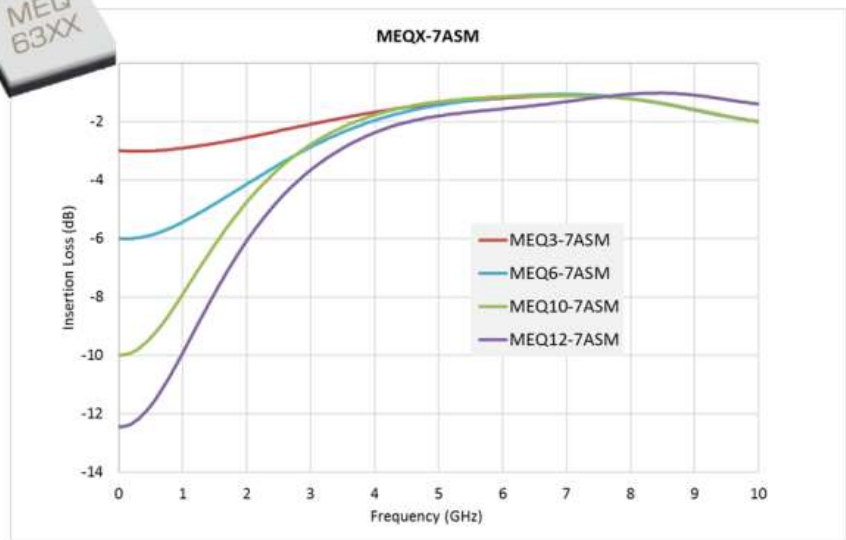
- DC atten from 3 to 12.5dB
- Broadband matched

### Rollout

- May/June 2018
- MEQ modules in Q3

### Packaging

- 3 x 3 mm QFN



## 10.2 Bare Die/Modules 裸芯片和同轴均衡器

Model	Low /GHz	High /GHz	Loss at DC (dB)	Return Loss (dB)	Surface Mount	Bare Die	Module
EQ3-26	DC	26	3	21	N	N	Y
EQ6-26	DC	26	6	15	N	N	Y
EQ6-40	DC	40	6	18	N	N	Y
EQ3-40	DC	40	3	18	N	N	Y
MEQ3-60A	DC	60	3	15	N	Y	N
MEQ3-30A	DC	30	3	20	N	Y	N
MEQ6-30A	DC	30	6	20	N	Y	N
MEQ6-60A	DC	60	6	15	N	Y	N
MEQ10-30A	DC	30	10	20	N	Y	N



Model	Low /GHz	High /GHz	Loss at DC (dB)	Return Loss (dB)	Surface Mount	Bare Die	Module
MEQ10-60A	DC	60	10	15	N	Y	N
MEQ3-7ACH	DC	7	3	29	N	Y	N
MEQ6-7ACH	DC	7	6	29	N	Y	N
MEQ10-7ACH	DC	7	10	27	N	Y	N
MEQ12-7ACH	DC	7	12.5	27	N	Y	N
MEQ3-14ACH	DC	14	3	23	N	Y	N
MEQ6-14ACH	DC	14	6	22	N	Y	N
MEQ10-14ACH	DC	14	10	24	N	Y	N
MEQ3-20ACH	DC	20	3	21	N	Y	N
MEQ5-20ACH	DC	20	5	22	N	Y	N
MEQ6-20ACH	DC	20	6	21	N	Y	N
MEQ7-20ACH	DC	20	7.5	23	N	Y	N
MEQ10-20ACH	DC	20	10	25	N	Y	N
MEQ11-20ACH	DC	20	11	23	N	Y	N
MEQ3-26AS	DC	26.5	3	18	N	N	Y
MEQ6-26AS	DC	26.5	6	20	N	N	Y
MEQ10-26AS	DC	26.5	10	20	N	N	Y
MEQ10-50AS	DC	50	10	15	N	N	Y

## 11. Filter 滤波器

### 11.1 Lowpass 同轴低通滤波器

Model	3 dB Cutoff Frequency [GHz]	Insertion Loss [dB]	Return Loss [dB]	Frequency @ 50 dB Suppression [GHz]	Surface Mount	Bare Die	Module
FLP-0490	4.9	0.6	30	9.3	N	N	Y
FLP-0750	7.5	0.9	30	12.5	N	N	Y
FLP-0960	9.6	0.6	25	17.25	N	N	Y
FLP-1250	12.5	0.6	20	19.5	N	N	Y
FLP-1460	14.6	0.6	20	25.5	N	N	Y
FLP-1740	17.4	0.9	20	23	N	N	Y
FLP-1800	18	1.2	20	21.75	N	N	Y
FLP-1940	19.4	0.9	20	33.75	N	N	Y
FLP-2000	20	1.2	20	24	N	N	Y
FLP-2150	21.5	1.2	18	32	N	N	Y
FLP-2360	23.6	1.3	18	33	N	N	Y
FLP-2650	26.5	1.5	15	36.5	N	N	Y
FLP-3200	32	1.8	15	41.5	N	N	Y
FLP-3660	36.6	1.8	15	46	N	N	Y
FLP-4300	43	2	15	52.5	N	N	Y
FLP-5000	50	2	15	62	N	N	Y

### 11.2 Highpass 同轴高通滤波器

Model	Cutoff Frequency [GHz]	30 dB Rejection [GHz]	50 dB Rejection Frequency [GHz]	80 dB Rejection Frequency [GHz]	SMT	Die	Module
FH-1700	17	14	11.5	6	N	N	Y
FH-1800	18	15	12	6.5	N	N	Y
FH-2600	26	21.5	18	11	N	N	Y
FH-4000	40	36.6	33	25	N	N	Y

Model	Cutoff Frequency [GHz]	30 dB Rejection [GHz]	50 dB Rejection Frequency [GHz]	80 dB Rejection Frequency [GHz]	SMT	Die	Module
FH-5500	55	51	45	35	N	N	Y

### 11.3 Bandpass 带通滤波器

Model	Fc [GHz]	Low Frequency 1 dB Cutoff [GHz]	High Frequency 1 dB Cutoff [GHz]	Surface Mount	Bare Die	Module
FB-0785SM	7.85	7.25	8.45	Y	N	N
FB-0850SM	8.5	7.85	9.2	Y	N	N
FB-0900SM	9.0	8.4	9.6	Y	N	N
FB-0955SM	9.55	8.9	10.2	Y	N	N
FB-1050SM	10.5	9.6	11.4	Y	N	N
FB-1140SM	11.4	10.45	12.35	Y	N	N
FB-1215SM	12.15	11.35	12.95	Y	N	N
FB-1300SM	13.0	12.0	14.0	Y	N	N
FB-1445SM	14.45	13.2	15.7	Y	N	N
FB-1575SM	15.75	14.6	16.9	Y	N	N
FB-0785	7.85	7.25	8.45	N	N	Y
FB-0860	8.6	7.95	9.25	N	N	Y
FB-0905	9.05	8.45	9.65	N	N	Y
FB-0955	9.55	8.9	10.2	N	N	Y
FB-1050	10.5	9.75	11.25	N	N	Y
FB-1145	11.45	10.6	12.3	N	N	Y
FB-1215	12.15	11.3	13	N	N	Y
FB-1310	13.1	12.2	14	N	N	Y
FB-1390	13.9	13.48	14.32	N	N	Y
FB-1445	14.45	13.3	15.6	N	N	Y
FB-1575	15.75	14.5	17	N	N	Y
FB-1725	17.25	15.8	18.7	N	N	Y

Model	Fc [GHz]	Low Frequency 1 dB Cutoff [GHz]	High Frequency 1 dB Cutoff [GHz]	Surface Mount	Bare Die	Module
FB-1800	18	15.85	20.15	N	N	Y
FB-1840	18.4	16.65	20.15	N	N	Y
FB-2000	20	18.6	21.4	N	N	Y
FB-2060	20.6	18.95	22.25	N	N	Y
FB-2400	24	22.4	25.6	N	N	Y
FB-2430	24.3	21.25	27.35	N	N	Y
FB-3270	32.7	28.75	36.65	N	N	Y
FB-3700	37	32.55	41.45	N	N	Y
FB-4000	40	34.4	45.6	N	N	Y
FB-2480	24.8	21.1	28.5	N	N	Y
FB-2770	27.7	23.55	31.85	N	N	Y
FB-1655	16.55	15.8	17.3	N	N	Y
FB-1690	16.9	15.7	18.1	N	N	Y
FB-1500	15	12	18	N	N	Y
FB-2250	22.5	18	27	N	N	Y
FB-2500	25	18	32	N	N	Y
FB-2020	20.2	17.2	23.2	N	N	Y
FB-1385	13.85	11.5	16.2	N	N	Y
FB-1450	14.5	11.1	17.9	N	N	Y
FB-3300	33	26	40	N	N	Y
MFB-1100	11	9.5	12.5	N	Y	N
MFB-1600	16	12.6	18.6	N	Y	N
MFB-2025	20.25	16.75	24.4	N	Y	N
MFB-2400	24	21	27	N	Y	N
MFB-2500	25	18	32	N	Y	N
MFB-2625	26.25	21.5	30	N	Y	N

Model	Fc [GHz]	Low Frequency 1 dB Cutoff [GHz]	High Frequency 1 dB Cutoff [GHz]	Surface Mount	Bare Die	Module
MFB-3175	31.75	26.6	36.7	N	Y	N
MFB-3300	33	26	40	N	Y	Y
MFB-3325	33.25	32	34.3	N	Y	N
MFB-3450	35	24	45	N	Y	N
MFB-3475	34.75	29.5	40	N	Y	N
MFB-5350	53	40	67	N	Y	N

### 11.4 Diplexers 双工器

Model	F low[GHz]		F High[GHz]		ISO [dB]	SMT	Bare Die	Module
	Low	High	Low	High				
DPX-M50	DC	0.035	0.07	10	24	Y	N	Y
DPX-0R5	DC	0.36	0.7	8	24	Y	N	Y
DPX-1	DC	0.85	1.4	5	24	Y	N	Y
DPX-2	DC	1.5	2.7	7	25	Y	N	Y
DPX-3	DC	2.3	4.2	8	25	Y	N	Y
DPX-4	DC	2.8	5.5	12	30	Y	N	Y
DPX-0508	DC	5	8	18	45	N	N	Y
DPX-9516	DC	9.5	16	32	40	N	N	Y
DPX-1114	DC	11	14	30	50	N	N	Y
DPX-1721	DC	17	21.5	40	50	N	N	Y
MDPX-2330	DC	23	30	60	36	N	Y	N
MDPX-2734	DC	27	34	60	38	N	Y	N

## 12. Assembly 配件

### 12.1 Adapters

Model	Low	High	IL [dB]	VSWR	Surface Mount	Bare Die	Module
ADP-2429	DC	40	0.3	1.2	N	N	Y
ADP-29	DC	40	0.3	1.2	N	N	Y
ADP-24	DC	50	0.5	1.3	N	N	Y
RA40	DC	40	0.3	1.4	N	N	Y
RA50	DC	50	0.3	1.4	N	N	Y

### 12.2 DC Blocks

Model	Low	High	Insertion Loss [dB]	Rise [ps]	Delay [ps]	Voltage [V]	Surface Mount	Bare Die	Module
DCZ(M-F)29(M-F)29	.000004	40	0.7	6	75	16	N	N	Y
DCZ(M-F)24(M-F)24	.000004	50	0.7	6	75	16	N	N	Y

### 12.3 Limiters

Model	Low	High	IL [dB]	RL [dB]	Surface Mount	Bare Die	Module
DLM-10SM	DC	10	0.75	20	Y	N	Y
HLM-40	DC	40	0.5	26	N	Y	Y

### 12.4 Thumbwheel

Model	Low	High	IL [dB]	VSWR	Surface Mount	Bare Die	Module
TW-1	-	-	-	-	N	N	N