

KEYLINK MICROWAVE

FOCUS ON YOUR APPLICATION

KEYLINK MICROWAVE

Professional Manufacturer:

RF Power Amplifiers

Microwave Components & Assemblies

RF & Microwave Subsystems



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COMPANY

INTRODUCTION

Since the inception in 2002, KeyLink Microwave has been devoted to designing, developing and manufacturing RF and microwave power amplifiers and all kinds of assemblies. As a high-tech enterprise, KeyLink has continued to advance microwave and RF technology to supply many critical solutions and products for radar, jamming, communication system, test and measurement, and other commercial and industrial market. Located in Chengdu, a microwave industrial base in China, KeyLink Microwave has gathered an excellent technical team and rich microwave technology resource to contribute to the global RF and microwave industry development.

Based on our 16 years' rich experience on designing, manufacturing RF and microwave amplifiers, KeyLink Microwave has established strict quality control program according to ISO9001 which assures high-reliability, ruggedness of our products. Meanwhile, with more than 10 years' experience in assemblies design, we have developed various kinds of assemblies products for customers. The excellent performance and high reliability help us win a good reputation in assemblies market.

KeyLink's purpose is to focus on customers' application. At KeyLink Microwave, it is available to add features to our standard products for customers. We will modify our standard design and integrate customer features with affordable added costs.



KeyLink Microwave offers a full product line:

Power Amplifier:	Components:	Assemblies:
Broadband High Power Amplifiers	Low Noise Amplifiers	Receiving Front End Assemblies
Linear High Efficiency Power Amplifiers	Limiting Amplifiers	Frequency Synthesizers
High Power Pulsed Amplifiers	Equalizers	Frequency Converter Assemblies
Narrowband High Power Amplifiers	Power Dividers	
Rack-Mountable Power Amplifiers	Mixers	
T/R	Switches	
	Digital Attenuators	
	Limiters	



ENTERPRISE QUALIFICATION



WHY KEYLINK?

- Self-owned plant of 4500m²; 280m² cleaning shop for MCM, 500m² lab for QC and testing
- Production capacity of 3000pcs per month
- Experienced R&D team of 35 members
- Certificate: ISO9001, CE
- Fast delivery: 4-6 Weeks
- Warranty: 3-5 Years

RESEARCH AND DEVELOPMENT



KeyLink Microwave owns a highly-skilled and knowledgeable engineering staff to lead all of our products, such as power amplifiers and all kinds of assemblies. The power amplifier engineers utilize state-of-the-art GaN, GaAs, LDMOS, and bipolar device technologies; combination techniques and component selection of transistors. This assures excellent performance in terms of high power, ultra-linearity, high efficiency, multi-octave and small size. Meanwhile our assemblies engineers own more than 10 years' experience in assemblies design that guarantees the excellent performance and high reliability of the assemblies products. Before manufacturing, all the product designs are simulated with CAD tools, and then prototyped and verified. Meanwhile, our engineers work closely with customers to understand their requirements in order to deliver application-oriented RF solutions.

CLASS 100,000 CLEAN ROOM

1. Surface mount components: Lead and lead-free soldering; Gold and silver conductive epoxy
2. Die Mounting: Eutectic die mounting with forming gas environment; Gold & silver epoxy die attach
3. Wire bonding: Ball bonder and wedge bonder
4. All microelectronic housings are hermetically sealed

Full ESD controlled environment for Microwave Circuit assembly and testing



KeyLink Microwave utilizes advanced test equipment to characterize our high technology products. Our inspection personnel strictly follow the quality standard ISO9001 to make sure the consistent and reliable quality. Our goal is to delivery 100% defect-free products every time.

TEST AND INSPECTION

COMPANY

PRODUCTS

Power Amplifier:

Broadband High Power Amplifiers
Linear High Efficiency Power Amplifiers
High Power Pulsed Amplifiers
Narrowband High Power Amplifiers
Rack-Mountable Power Amplifiers
T/R

Components:

Low Noise Amplifiers
Limiting Amplifiers
Equalizers
Power Dividers
Mixers
Switches
Digital Attenuators
Limiters

Assemblies:

Receiving Front End Assemblies
Frequency Synthesizers
Frequency Converter Assemblies



BROADBAND HIGH POWER AMPLIFIERS



KeyLink's high power broadband amplifiers are available for operating frequencies from 1 MHz to 18 GHz. Power levels for octave and multi-octave designs range from 2 watt to over 500 watts. Based on state-of-the-art GaN, GaAs, LDMOS power devices and MMICs, KeyLink MW designs and manufactures solid state power amplifiers with excellent performance in terms of high efficiency over ultra-wide working band, high reliability and ruggedness.

Features of KeyLink MW's power amplifiers make them suitable for a variety of application fields including jamming, communication, test and radar systems where smaller size, less power consuming, cooling, high output power are required.

KeyLink's broadband high power amplifiers can be categorized as follows.



01



02



03

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.					
KB0001003M47A	1	30	50	47	28	5	150 x 90 x 27
KB0001003M50A	1	30	100	50	28	9	150 x 90 x 27
KB0001003M53A	1	30	200	53	28	20	200 x 150 x 30
KB003008M47A	30	88	50	47	28	6	150 x 90 x 27
KB003008M50A	30	88	100	50	28	10	180 x 90 x 27
KB003008M53A	30	88	200	53	28	16	200 x 150 x 27
KB000101M43A	1	100	20	43	28	3	120 x 80 x 27
KB000101M47A	1	100	50	47	28	5	150 x 90 x 27
KB0204M43A	225	400	20	43	28	3	120 x 90 x 27
KB0204M47A	225	400	50	47	28	6	150 x 90 x 27
KB0204M50A	225	400	100	50	28	8.5	180 x 90 x 27
KB0204M53A	225	400	200	53	28	16	200 x 150 x 27
KB0204M55A	225	400	300	56	42	18	220 x 180 x 30
KB002052M43A	20	520	20	43	28	3	120 x 80 x 27
KB002052M47A	20	520	50	47	28	7	150 x 90 x 27
KB002052M50A	20	520	100	50	28	12	180 x 90 x 27
KB002052M53A	20	520	200	53	28	16	200 x 150 x 27
KB00207M45A	20	700	30	45	28	3	150 x 90 x 27
KB00207M49A	20	700	80	49	28	9	180 x 90 x 27
KB0608M53A	600	800	200	53	28	16	180 x 150 x 27
KB047086M45A	470	860	30	45	28	4	150 x 90 x 25
KB047086M49A	470	860	80	49	28	8	180 x 90 x 25
KB047086M53A	470	860	200	53	28	17	200 x 150 x 25
KB00210M49A	20	1000	80	49	28	10	150 x 90 x 25
KB00810M43A	80	1000	20	43	28	4	120 x 80 x 25
KB00810M47A	80	1000	50	47	28	7	150 x 90 x 25
KB00810M49A	80	1000	80	49	28	10	150 x 90 x 27
KB00810M50A	80	1000	100	50	28	12	160 x 120 x 27
KB0410M40A	400	1000	10	40	28	3	150 x 90 x 27
KB0410M44A	400	1000	25	44	28	4	180 x 90 x 27
KB0410M47A	400	1000	50	47	28	8	180 x 90 x 27
KB0510M45A	500	1000	30	45	28	4	150 x 90 x 25
KB0510M47A	500	1000	50	47	28	7	150 x 90 x 25
KB0510M50A	500	1000	100	50	28	13	180 x 90 x 25
KB0510M53A	500	1000	200	53	28	24	200 x 150 x 25

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.					
KB0810M47A	800	1000	50	47	28	7	150 x 90 x 25
KB0810M50A	800	1000	100	50	28	13	180 x 90 x 25
KB0810M53A	800	1000	200	53	28	25	200 x 150 x 25
KB0913M47A	900	1300	50	47	28	7	150 x 90 x 25
KB0913M53A	900	1300	200	53	28	25	200 x 150 x 25
KB1216M47A	1200	1600	50	47	28	7	150 x 90 x 25
KB1216M53A	1200	1600	200	53	28	25	200 x 150 x 25
KB0520M43A	500	2000	20	43	28	3	150 x 90 x 22
KB0520M47A	500	2000	50	47	28	8	150 x 90 x 25
KB0520M50A	500	2000	100	50	28	15	180 x 90 x 25
KB0520M53A	500	2000	200	53	28	25	200 x 150 x 25
KB1020M47A	1000	2000	50	47	28	8	150 x 90 x 25
KB1020M50A	1000	2000	100	50	28	15	180 x 90 x 25
KB1020M53A	1000	2000	200	53	28	25	200 x 150 x 25
KB0525M43A	500	2500	20	43	28	3	150 x 90 x 22
KB0525M47A	500	2500	50	47	28	8	150 x 90 x 25
KB0525M50A	500	2500	100	50	28	15	180 x 90 x 25
KB0525M53A	500	2500	200	53	28	25	200 x 150 x 25
KB0825M43A	800	2500	20	43	28	3	150 x 90 x 22
KB0825M47A	800	2500	50	47	28	8	150 x 90 x 25
KB0825M49A	800	2500	80	49	28	12	180 x 90 x 25
KB0825M52A	800	2500	150	52	28	20	200 x 150 x 25
KB1025M47A	1000	2500	50	47	28	7	150 x 90 x 25
KB1025M50A	1000	2500	100	50	28	15	180 x 90 x 25
KB1025M53A	1000	2500	200	53	28	25	200 x 150 x 25
KB0527M43A	500	2700	20	43	28	3	150 x 90 x 22
KB0527M47A	500	2700	50	47	28	8	150 x 90 x 25
KB0527M50A	500	2700	100	50	28	15	180 x 90 x 25
KB0527M53A	500	2700	200	53	28	25	200 x 150 x 25
KB0727M43A	700	2700	20	43	28	3	150 x 90 x 22
KB0727M47A	700	2700	50	47	28	8	150 x 90 x 25
KB0727M50A	700	2700	100	50	28	15	180 x 90 x 25
KB0727M53A	700	2700	200	53	28	25	200 x 150 x 25
KB0830M45A	800	3000	30	45	28	5	150 x 90 x 22
KB0830M49A	800	3000	80	49	28	10	200 x 150 x 25
KB0830M52A	800	3000	150	52	28	20	250 x 200 x 25

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.					
KB1030M47A	1000	3000	50	47	28	7	200 x 120 x 25
KB1030M50A	1000	3000	100	50	28	15	180 x 150 x 25
KB1030M53A	1000	3000	200	53	28	25	250 x 200 x 25
KB0732M43A	700	3200	20	43	50	5	150 x 90 x 22
KB0732M47A	700	3200	50	47	50	8	200 x 120 x 25
KB0732M50A	700	3200	100	50	50	15	200 x 150 x 25
KB0732M53A	700	3200	200	53	50	25	250 x 200 x 25
KB2735M47A	2700	3500	50	47	28	9	150 x 90 x 25
KB2735M50A	2700	3500	100	50	28	15	180 x 90 x 30
KB2735M53A	2700	3500	200	53	28	28	200 x 150 x 30
KB0738M43A	700	3800	20	43	28	5	150 x 90 x 22
KB0738M47A	700	3800	50	47	28	14	200 x 120 x 25
KB0738M50A	700	3800	100	50	28	25	200 x 150 x 25
KB0840M47B	800	4000	50	47	48	14	200 x 120 x 25
KB0840M49B	800	4000	80	49	48	16	200 x 150 x 25
KB2040M47A	2000	4000	50	47	28	9	200 x 120 x 25
KB2040M50A	2000	4000	100	50	48	15	200 x 150 x 25
KB1060M43A	1000	6000	20	43	50	8	150 x 100 x 22
KB1060M47A	1000	6000	50	47	50	15	400 x 300 x 25
KB2060M43A	2000	6000	20	43	28	5	160 x 100 x 25
KB2060M47A	2000	6000	50	47	28	12	160 x 100 x 25
KB2060M48A	2000	6000	70	48	28	15	160 x 100 x 25
KB2560M45A	2500	6000	30	45	28	8	160 x 100 x 25
KB2560M47A	2500	6000	50	47	28	12	160 x 100 x 25
KB60100M40A	6000	10000	10	40	28	2.5	120 x 80 x 22
KB60100M43A	6000	10000	20	43	28	6	160 x 120 x 22
KB60100M47A	6000	10000	50	47	28	13	160 x 120 x 22
KB80120M37A	8000	12000	5	37	28	2	120 x 80 x 22
KB80120M41A	8000	12000	12	41	28	4	120 x 80 x 22
KB80120M43A	8000	12000	20	43	28	6	160 x 120 x 22
KB80120M47A	8000	12000	50	47	28	12	160 x 120 x 22
KB20180M37A	2000	18000	5	37	28	3	120 x 80 x 22

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.					
KB60180M33A	6000	18000	2	33	28	1	120 x 80 x 22
KB60180M37A	6000	18000	5	37	28	2	120 x 80 x 22
KB60180M40A	6000	18000	10	40	28	5	120 x 80 x 22
KB60180M44A	6000	18000	25	44	28	7	160 x 120 x 22
KB60180M46A	6000	18000	40	46	28	12	160 x 120 x 22

LINEAR HIGH EFFICIENCY POWER AMPLIFIERS



KeyLink's linear power amplifiers are available for operating frequencies from 1MHz to 18GHz with output power from 1 to 100 watts. Combined with Analog Predistortion and Digital Predistortion Methods, these broadband linear power amplifiers provide ultra low distortion, suitable for multi-band, multi-mode communication applications. With built-in monitor circuits, KeyLink's power amplifiers assure consistent performance in terms of reliability. KeyLink's linear power amplifiers can be categorized as follows.



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02



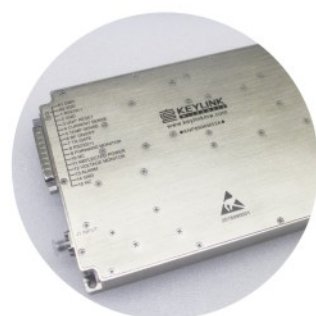
03

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.					
KL0001003M40A	1	30	10	40	28	2	120 x 80 x 27
KL0001003M45A	1	30	30	45	28	5	120 x 80 x 27
KL0001003M47A	1	30	50	47	28	8	150 x 90 x 27
KL0001003M49A	1	30	80	49	28	10	150 x 90 x 27
KL003009M40A	30	90	10	40	28	2	120 x 80 x 25
KL003009M45A	30	90	30	45	28	4	120 x 80 x 25
KL003009M47A	30	90	50	47	28	6	150 x 90 x 25
KL003009M49A	30	90	80	49	28	10	150 x 90 x 27
KL0104M43A	100	400	20	43	28	3	120 x 80 x 25
KL0104M47A	100	400	50	47	28	8	150 x 90 x 25
KL0104M49A	100	400	80	49	28	10	150 x 90 x 25
KL0104M50A	100	400	100	50	28	13	180 x 90 x 27
KL002052M43A	20	520	20	43	28	3	120 x 80 x 25
KL002052M47A	20	520	50	47	28	7	150 x 90 x 25
KL002052M49A	20	520	80	49	28	10	150 x 90 x 25
KL002052M50A	20	520	100	50	28	12	180 x 90 x 27
KL0608M45A	600	800	30	45	28	3	150 x 90 x 25
KL0608M47A	600	800	50	47	28	7	150 x 90 x 25
KL0608M49A	600	800	80	49	28	12	180 x 90 x 25
KL0810M43A	800	1000	20	43	28	3	150 x 90 x 25
KL0810M47A	800	1000	50	47	28	7.5	180 x 90 x 25
KL1517M43A	1500	1700	20	43	28	3.5	150 x 90 x 25
KL1517M47A	1500	1700	50	47	28	8	150 x 90 x 25
KL1719M43A	1700	1900	20	43	28	3.5	150 x 90 x 25
KL1719M49A	1700	1900	80	49	28	13	180 x 90 x 25
KL2022M47A	2000	2200	50	47	28	8.5	180 x 90 x 25
KL2022M50A	2000	2200	100	50	28	17	170 x 130 x 30
KL2325M47A	2300	2500	50	47	28	8.5	180 x 90 x 25
KL2325M50A	2300	2500	100	50	28	17	170 x 130 x 30
KL5358M40A	5300	5800	10	40	12	6	150 x 90 x 25
KL5358M47A	5300	5800	50	47	12	27	170 x 130 x 30
KL140145M39A	14000	14500	8	39	12	5.5	150 x 90 x 25
KL140145M42A	14000	14500	15	42	12	10	150 x 90 x 25
KL137145M39A	13750	14500	8	39	12	6.5	150 x 90 x 25
KL137145M42A	13750	14500	15	42	12	12	180 x 90 x 25

HIGH POWER PULSED AMPLIFIERS



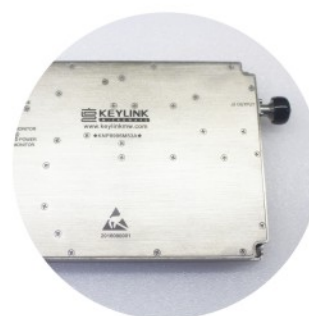
Variety of pulsed power amplifiers from KeyLink microwave are available for Radar application with frequency ranging from HF to Ku band and output power from several watts to kilo-watts. These power amplifiers are designed with state-of-the-art power devices providing excellent performances in terms of high-efficiency, high-reliability, good linearity lighter weight, and smaller size. KeyLink's pulsed power amplifiers can be categorized as follows.



01



02



03

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	Efficiency (%)	Power Droop (dB)	Duty Cycle (%)	Pulse Width (uS)	Voltage (V)	Size (mm)
KNP100M60A	88 108	1000	60	35	1	10	100	50	300 x 250 x 30
KNP430M57A	420 450	520	57	35	1	10	100	50	300 x 180 x 30
KNP440M57A	430 450	500	57	35	1	10	100	50	300 x 180 x 30
KNP998M63A	997 1001	2000	63	30	1	1	30	46	300 x 280 x 30
KNP998M66A	997 1001	4000	66	25	1	1	30	46	420 x 280 x 45
KNP1030M66A	1029.9 1030.1	4000	66	25	1	2	32	50	420 x 280 x 45
KNP1100M63A	1025 1150	2000	63	25	1	5	5	50	420 x 280 x 45
KNP1300M55A	1200 1400	300	55	35	1	20	50	50	170 x 130 x 30
KNP1300M60A	1200 1400	1000	60	35	1	20	50	50	300 x 250 x 30
KNP1300M63A	1200 1400	2000	63	35	1	20	50	50	300 x 280 x 30
KNP2800M61A	2700 2900	1300	50	30	1	10	50	50	300 x 220 x 45
KNP3000M55A	2988 3012	300	55	30	1	0.04	20	50	200 x 140 x 35
KNP3000M56A	2988 3012	400	56	30	1	5	100	50	200 x 140 x 35
KNP2900M55A	2700 3100	300	55	30	1	10	100	32	170 x 130 x 30
KNP2900M60A	2700 3100	1000	60	30	1	10	100	32	300 x 250 x 30
KNP2900M63A	2700 3100	2000	63	30	1	10	50	32	300 x 280 x 30
KNP3300M55A	3100 3500	300	55	30	1	5	50	50	170 x 150 x 30
KNP3300M59A	3100 3500	800	37	30	1	10	2	50	280 x 160 x 45
KNP3300M60A	3100 3500	1000	60	30	1	5	50	50	300 x 250 x 30
KNP3300M63A	3100 3500	2000	63	30	1	5	50	50	300 x 280 x 35
KNP4100M49A	3800 4400	80	49	35	1	10	50	30	190 x 100 x 45
KNP5350M50A	5200 5500	100	50	30	1	10	100	32	230 x 150 x 35
KNP5450M55A	5200 5700	350	55	20	1	10	100	32	230 x 150 x 35
KNP5450M58A	5200 5700	650	58	20	1	10	100	32	250 x 200 x 30
KNP5450M61A	5200 5700	1200	61	20	1	10	100	32	300 x 280 x 35
KNP5650M55A	5600 5700	350	55	20	1	10	100	50	170 x 150 x 30
KNP5650M58A	5600 5700	650	58	20	1	10	100	50	250 x 200 x 30
KNP5650M61A	5600 5700	1200	61	20	1	10	100	50	300 x 280 x 35

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	Efficiency (%)	Power Droop (dB)	Duty Cycle (%)	Pulse Width (uS)	Voltage (V)	Size (mm)
KNP5650M55A	5400 5900	300	55	30	1	10	150	50	210 x 150 x 45
KNP6300M46A	6000 6600	40	46	20	1	10	100	28	150 x 90 x 25
KNP6300M49A	6000 6600	80	49	20	1	10	100	28	170 x 130 x 25
KNP6300M51A	6000 6600	120	51	20	1	10	100	28	170 x 150 x 25
KNP6800M46A	6400 7200	40	46	20	1	10	100	28	150 x 90 x 25
KNP6800M49A	6400 7200	80	49	20	1	10	100	28	170 x 130 x 25
KNP6800M51A	6400 7200	120	51	20	1	10	100	28	170 x 150 x 25
KNP8100M46A	7700 8500	40	46	20	1	10	100	28	150 x 90 x 25
KNP8100M49A	7700 8500	80	49	20	1	10	100	28	170 x 130 x 25
KNP8100M51A	7700 8500	120	51	20	1	10	100	28	170 x 150 x 25
KNP8600M47A	7600 9600	50	47	15	1	10	100	40	150 x 100 x 25
KNP8600M50A	7600 9600	100	50	15	1	10	100	40	200 x 150 x 25
KNP8600M53A	7600 9600	200	53	15	1	10	100	40	250 x 180 x 25
KNP9200M47A	8900 9600	50	47	15	1	10	100	40	150 x 100 x 25
KNP9200M50A	8900 9600	100	50	12	1	10	100	40	180 x 125 x 25
KNP9200M53A	8900 9600	200	53	15	1	10	100	40	180 x 125 x 25
KNP9500M47A	9000 10000	50	47	15	1	10	100	24	150 x 100 x 25
KNP9500M50A	9000 10000	100	50	15	1	10	100	24	200 x 125 x 25
KNP9500M53A	9000 10000	200	53	15	1	10	100	24	250 x 180 x 25
KNP9600M47A	9200 10000	50	47	15	1	10	100	24	150 x 100 x 25
KNP9600M50A	9200 10000	100	50	15	1	10	100	24	200 x 125 x 25
KNP9600M53A	9200 10000	200	53	15	1	10	100	24	250 x 180 x 25
KBP80110M47A	8000 11000	50	47	15	1	10	100	28	150 x 120 x 25
KBP80110M50A	8000 11000	100	50	15	1	10	100	28	200 x 150 x 25
KBP80110M53A	8000 11000	200	53	15	1	10	100	28	300 x 200 x 25
KNP10500M47A	10000 11000	50	47	15	1	10	100	28	150 x 100 x 25
KNP10500M50A	10000 11000	100	50	15	1	10	100	28	200 x 125 x 25
KNP10500M53A	10000 11000	200	53	15	1	10	100	28	250 x 180 x 25
KNP16500M43A	16000 17000	20	43	15	1	5	7.5	50	160 x 120 x 20
KNP16500M47A	16000 17000	50	47	15	1	5	7.5	50	160 x 120 x 20

NARROWBAND HIGH POWER AMPLIFIERS



KeyLink's narrowband amplifiers are available for operating frequencies within 18 GHz and with a variety of power ratings from 1W to 500W. KeyLink's narrowband amplifiers have the advantages of small size, high efficiency, stability and reliability, which can be applied to all kinds of equipment, medical equipment, radar simulation and jamming.



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02

03

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
KN150M50A	135 175	100	50	28	10	170 x 130 x 30
KN440M50A	400 470	100	50	28	12	170 x 130 x 30
KN440M52A	400 470	150	52	28	15	170 x 130 x 30
KN800M52A	791 821	150	52	28	16	170 x 130 x 30
KN940M52A	925 965	150	52	28	17	170 x 130 x 30
KN1050M53A	900 1170	200	54	28	26	170 x 130 x 30
KN1030M48A	1020 1040	60	48	28	7	170 x 100 x 27
KN1250M53A	1171 1381	200	53	28	29	170 x 130 x 30
KN1300M54A	1200 1400	250	54	28	29	220 x 150 x 30
KN1497M47A	1494 1500	50	47	28	7	150 x 70 x 27
KN1600M52A	1570 1620	150	52	28	23	170 x 130 x 30
KN1795M47A	1710 1880	50	47	28	7	150 x 90 x 25
KN1795M50A	1710 1880	100	50	28	14	170 x 130 x 30
KN1795M53A	1710 1880	200	53	28	24	170 x 130 x 30
KN1840M47A	1805 1880	50	47	28	7	150 x 90 x 25
KN1840M52A	1805 1880	150	52	28	24	170 x 130 x 30
KN1840M53A	1805 1880	200	53	28	26	170 x 130 x 30
KN1820M43A	1800 2000	20	43	28	4	120 x 80 x 22
KN1820M47A	1800 2000	50	47	28	9	150 x 90 x 25
KN1820M49A	1800 2000	80	49	28	15	150 x 100 x 25
KN1850M50A	1800 1900	100	50	28	15	170 x 130 x 30
KN1960M47A	1930 1990	50	47	28	8	150 x 90 x 25
KN1960M50A	1930 1990	100	50	28	14	170 x 130 x 30
KN1960M53A	1930 1990	200	53	28	24	170 x 130 x 30
KN1940M48A	1710 2170	60	48	28	9	190 x 100 x 27
KN2045M47A	1920 2170	50	47	28	8	150 x 90 x 25
KN2045M50A	1920 2170	100	50	28	14	200 x 150 x 30
KN2045M53A	1920 2170	200	53	28	25	250 x 160 x 30

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
KN2150M47A	2110 2170	50	47	28	8	150 x 90 x 25
KN2150M52A	2110 2170	150	52	28	24	170 x 130 x 30
KN2150M53A	2110 2170	200	53	28	26	170 x 130 x 30
KN2100M47A	2000 2200	50	47	28	8	150 x 90 x 25
KN2100M50A	2000 2200	100	50	28	15	170 x 130 x 30
KN2100M53A	2000 2200	200	53	28	26	170 x 130 x 30
KN2300M47A	2200 2400	50	47	28	8	150 x 90 x 25
KN2300M50A	2200 2400	100	50	28	15	170 x 130 x 30
KN2300M53A	2200 2400	200	53	28	26	170 x 130 x 30
KN2023M43A	2000 2300	20	44	28	5	100 x 90 x 22
KN2023M47A	2000 2300	50	48	28	8	150 x 90 x 25
KN2023M49A	2000 2300	80	49	28	17	150 x 90 x 25
KN2400M47A	2300 2500	50	47	28	8	150 x 90 x 25
KN2400M50A	2300 2500	100	50	28	15	170 x 130 x 30
KN2400M53A	2300 2500	200	28	28	24	170 x 130 x 30
KN2450M47A	2400 2500	50	47	28	8	150 x 90 x 25
KN2450M50A	2400 2500	100	50	28	15	170 x 130 x 30
KN2450M53A	2400 2500	200	53	28	24	170 x 130 x 30
KN2545M47A	2520 2570	50	47	28	8	150 x 90 x 25
KN2545M50A	2520 2570	100	50	28	15	170 x 130 x 30
KN2545M53A	2520 2570	200	53	28	24	170 x 130 x 30
KN2650M47A	2620 2690	50	47	28	8	150 x 90 x 25
KN2650M52A	2620 2690	150	52	28	24	170 x 130 x 30
KN2650M53A	2620 2690	200	53	28	26	170 x 130 x 30
KN2550M47A	2400 2700	50	47	28	8	200 x 100 x 27
KN2600M47A	2500 2700	50	47	28	8	150 x 90 x 25
KN2600M50A	2500 2700	100	50	28	15	170 x 130 x 30
KN2600M53A	2500 2700	200	53	28	26	170 x 130 x 30
KN3300M50A	3100 3500	100	50	28	12	175 x 100 x 28
KN5200M47A	5000 5400	50	47	28	11	180 x 150 x 25
KN5750M47A	5400 5900	50	47	28	11	180 x 150 x 25

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
KN5800M55A	5790 5810	300	55	28	52	250 x 200 x 30
KN5500M47A	5100 5900	50	47	28	12	180 x 150 x 25
KN14000M43A	13600 14400	20	46	28	6	150 x 90 x 25
KN14000M47A	13600 14400	50	47	28	11	170 x 130 x 25
KN14000M50A	13600 14400	100	50	28	20	170 x 150 x 25
KN14900M43A	14400 15400	20	43	28	6	150 x 90 x 25
KN14900M47A	14400 15400	50	47	28	11	170 x 130 x 25
KN14900M50A	14400 15400	100	50	28	20	170 x 150 x 25

RACK-MOUNTABLE POWER AMPLIFIERS

01



02



KeyLink Microwave provides ultra-broadband power amplifier systems in rack-mounted configuration with output power capacity from 50-Watt to 2000-Watt for applications including EMC testing, communications, and TWT replacement.

Built-in monitor circuit helps these power amplifier systems survive from any faulty working conditions such as over-driven, load-mismatch and thermal overload.

Digital interfaces as Ethernet and RS232 / RS422 are available for remote on / off switch and power level control.

KeyLink's rack-mountable power amplifiers can be categorized as follows.

Model No.	Frequency (MHz) Min. Max.	Pout (Watts)	Power Gain (dB)	AC Power Input	Size (mm)
KB0001003S53A	1.5 30	200	53	100~260VAC, 50/60Hz	19", 4U
KB0001003S57A	1.5 30	500	57	100~260VAC, 50/60Hz	19", 5U
KB0001003S60A	1.5 30	1000	61	100~260VAC, 50/60Hz	19", 5U+4U
KB000101S54A	1 100	250	54	100~260VAC, 50/60Hz	19", 5U
KB000101S57A	1 100	500	57	100~260VAC, 50/60Hz	19", 5U+2U
KB00201S53A	20 100	200	54	100~260VAC, 50/60Hz	19", 4U
KB00201S57A	20 100	500	57	100~260VAC, 50/60Hz	19", 5U
KB00201S62A	20 100	1500	62	100~260VAC, 50/60Hz	19", 5U+5U
KB00202S60A	20 200	1000	61	100~260VAC, 50/60Hz	19", 5U+4U
KB0204S57A	225 400	500	57	100~260VAC, 50/60Hz	19", 5U
KB0204S60A	225 400	1000	61	100~260VAC, 50/60Hz	19", 5U+5U
KB0105S54A	100 500	250	54	100~260VAC, 50/60Hz	19", 3U
KB0105S57A	100 500	500	57	100~260VAC, 50/60Hz	19", 5U+3U
KB0105S60A	100 500	1000	61	100~260VAC, 50/60Hz	19", 5U+5U
KB002052S54A	20 520	300	54	100~260VAC, 50/60Hz	19", 4U
KB002052S57A	20 520	500	61	100~260VAC, 50/60Hz	19", 5U+3U
KNP810S57A	791 821	500	57	100~260VAC, 50/60Hz	19", 4U
KNP820S57A	806 825	500	57	100~260VAC, 50/60Hz	19", 4U
KNP860S57A	850 870	500	57	100~260VAC, 50/60Hz	19", 4U
KNP880S57A	861 894	500	57	100~260VAC, 50/60Hz	19", 4U
KNP920S57A	890 960	500	57	100~260VAC, 50/60Hz	19", 4U
KB00210S51A	20 1000	125	51	100~260VAC, 50/60Hz	19", 4U
KB00210S53A	20 1000	200	54	100~260VAC, 50/60Hz	19", 4U
KB00210S60A	20 1000	1000	61	100~260VAC, 50/60Hz	19", 5U+5U
KB00810S53A	80 1000	200	54	100~260VAC, 50/60Hz	19", 4U
KB00810S57A	80 1000	500	58	100~260VAC, 50/60Hz	19", 5U
KB00810S60A	80 1000	1000	61	100~260VAC, 50/60Hz	19", 5U+5U
KB0410S53A	400 1000	200	54	100~260VAC, 50/60Hz	19", 4U
KB0410S55A	400 1000	500	58	100~260VAC, 50/60Hz	19", 5U+2U
KB0410S60A	400 1000	1000	61	100~260VAC, 50/60Hz	19", 5U+3U
KB0512S53A	500 1200	200	53	100~260VAC, 50/60Hz	19", 4U
KB0512S57A	500 1200	500	57	100~260VAC, 50/60Hz	19", 5U
KB0512S60A	500 1200	1000	60	100~260VAC, 50/60Hz	19", 5U+3U

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	AC Power Input	Size (mm)
	Min.	Max.				
KNP1400S57A	1200	1600	500	57	100~260VAC, 50/60Hz	19", 4U
KNP1400S60A	1200	1600	1000	60	100~260VAC, 50/60Hz	19", 5U+3U
KNP1800S57A	1710	1880	500	57	100~260VAC, 50/60Hz	19", 4U
KB0820S50A	800	2000	100	50	100~260VAC, 50/60Hz	19", 4U
KB0820S53A	800	2000	200	53	100~260VAC, 50/60Hz	19", 4U
KB0820S57A	800	2000	500	57	100~260VAC, 50/60Hz	19", 5U
KB0820S60A	800	2000	1000	60	100~260VAC, 50/60Hz	19", 5U+3U
KB1020S50A	1000	2000	100	50	100~260VAC, 50/60Hz	19", 4U
KB1020S53A	1000	2000	200	53	100~260VAC, 50/60Hz	19", 4U
KB1020S55A	1000	2000	300	55	100~260VAC, 50/60Hz	19", 4U
KB1020S57A	1000	2000	500	57	100~260VAC, 50/60Hz	19", 5U
KNP2000S57A	1800	2200	500	57	100~260VAC, 50/60Hz	19", 4U
KNP2000S60A	1800	2200	1000	60	100~260VAC, 50/60Hz	19", 5U+3U
KB0723S53A	700	2300	200	53	100~260VAC, 50/60Hz	19", 4U
KB0723S57A	700	2300	500	57	100~260VAC, 50/60Hz	19", 5U
KB0525S51A	500	2500	125	51	100~260VAC, 50/60Hz	19", 4U
KB0525S53A	500	2500	200	53	100~260VAC, 50/60Hz	19", 4U
KB0525S57A	500	2500	500	57	100~260VAC, 50/60Hz	19", 5U
KB0825S50A	800	2500	100	50	100~260VAC, 50/60Hz	19", 4U
KB0825S53A	800	2500	200	53	100~260VAC, 50/60Hz	19", 4U
KB0825S57A	800	2500	500	57	100~260VAC, 50/60Hz	19", 5U
KNP2400S57A	2300	2500	500	57	100~260VAC, 50/60Hz	19", 4U
KB0527S50A	500	2700	100	50	100~260VAC, 50/60Hz	19", 4U
KB0527S53A	500	2700	200	53	100~260VAC, 50/60Hz	19", 4U
KB0527S57A	500	2700	500	57	100~260VAC, 50/60Hz	19", 5U
KNP2500S57A	2300	2700	500	57	100~260VAC, 50/60Hz	19", 5U
KNP2600S57A	2500	2700	500	57	100~260VAC, 50/60Hz	19", 5U
KB0830S50A	800	3000	100	50	100~260VAC, 50/60Hz	19", 4U
KB0830S53A	800	3000	200	53	100~260VAC, 50/60Hz	19", 4U
KB0830S57A	800	3000	500	57	100~260VAC, 50/60Hz	19", 5U
KB0830S60A	800	3000	1000	60	100~260VAC, 50/60Hz	19", 5U+3U
KB1030S50A	1000	3000	100	50	100~260VAC, 50/60Hz	19", 4U
KB1030S53A	1000	3000	200	53	100~260VAC, 50/60Hz	19", 5U
KB1030S57A	1000	3000	500	57	100~260VAC, 50/60Hz	19", 5U
KB1030S60A	1000	3000	1000	60	100~260VAC, 50/60Hz	19", 5U+3U

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	AC Power Input	Size (mm)
	Min.	Max.				
KNP2900S57A	2700	3100	500	57	100~260VAC, 50/60Hz	19", 4U
KNP2900S60A	2700	3100	1000	60	100~260VAC, 50/60Hz	19", 5U+3U
KB0732S53A	700	3200	200	53	100~260VAC, 50/60Hz	19", 4U
KB0732S57A	700	3200	500	57	100~260VAC, 50/60Hz	19", 5U
KB0738S50A	700	3800	100	50	100~260VAC, 50/60Hz	19", 4U
KB0738S53A	700	3800	200	53	100~260VAC, 50/60Hz	19", 4U
KB0738S57A	700	3800	500	57	100~260VAC, 50/60Hz	19", 5U
KB2040S47A	2000	4000	50	47	100~260VAC, 50/60Hz	19", 4U
KB2040S50A	2000	4000	100	50	100~260VAC, 50/60Hz	19", 4U
KB2040S53A	2000	4000	200	53	100~260VAC, 50/60Hz	19", 5U
KB0842S47A	800	4200	50	47	100~260VAC, 50/60Hz	19", 4U
KB0842S50A	800	4200	100	50	100~260VAC, 50/60Hz	19", 5U
KB1060S50A	1000	6000	100	50	100~260VAC, 50/60Hz	19", 5U
KB2060S49A	2000	6000	80	50	100~260VAC, 50/60Hz	19", 4U
KB2060S53A	2000	6000	200	53	100~260VAC, 50/60Hz	19", 5U
KB2560S47A	2500	6000	50	47	100~260VAC, 50/60Hz	19", 4U
KB2560S50A	2500	6000	100	50	100~260VAC, 50/60Hz	19", 5U
KB2560S53A	2500	6000	200	53	100~260VAC, 50/60Hz	19", 5U
KB3060S50A	3000	6000	100	50	100~260VAC, 50/60Hz	19", 5U
KNP6300S55A	6000	6600	300/PW=100us DC=10%	55	100~260VAC, 50/60Hz	19", 5U
KNP6800S55A	6400	7200	300/PW=100us DC=10%	55	100~260VAC, 50/60Hz	19", 5U
KNP8600S55A	7600	9600	500/PW=100us DC=10%	57	100~260VAC, 50/60Hz	19", 5U
KNP8600S60A	7600	9600	1000/PW=100us DC=5%	60	100~260VAC, 50/60Hz	19", 5U+4U
KNP9200S55A	8900	9600	300/PW=100us DC=5%	55	100~260VAC, 50/60Hz	19", 5U
KNP9200S57A	8900	9600	500/PW=100us DC=10%	57	100~260VAC, 50/60Hz	19", 5U
KNP9200S60A	8900	9600	1000/PW=100us DC=5%	60	100~260VAC, 50/60Hz	19", 5U
KNP9300S53A	9100	9600	200/PW=100us DC=5%	53	100~260VAC, 50/60Hz	19", 4U
KNP9500S60A	9000	10000	1000/PW=100us DC=5%	60	100~260VAC, 50/60Hz	19", 5U
KN14900S53A	14400	15400	200	53	100~260VAC, 50/60Hz	19", 5U
KB60180S43A	6000	18000	20	43	100~260VAC, 50/60Hz	19", 4U
KB60180S47A	6000	18000	50	47	100~260VAC, 50/60Hz	19", 5U

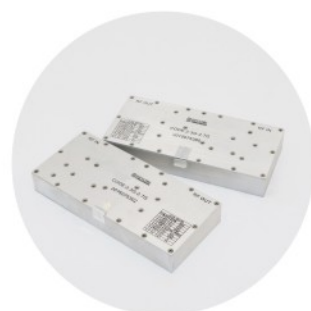
T/R



KeyLink's T/R assemblies can provide excellent linearity in transmitting branch and good noise figure in receiving branch, which working in time-sharing mode between receiving and transmitting. KeyLink's T/R assemblies can be used in various communication systems.



01



02



03

Model No.	Frequency (MHz)		P1(dBm)		Gain(dB)		NF (dB)	Voltage (V)	Typ. Current (A)	Size (mm)
	Min.	Max.	RX	TX	RX	TX				
KBTR0204M43A	225	400	10	43	10	45	2.5	28	3	150 x 90 x 27
KBTR0204M47A	225	400	10	47	22	49	2.5	28	8	180 x 150 x 27
KNTR0608M43A	600	800	10	43	10	45	2.5	28	3	150 x 90 x 27
KNTR0608M47A	600	800	20	47	22	49	2.5	28	8	180 x 150 x 27
KNTR0608M50A	600	800	25	50	27	52	3	28	15	200 x 160 x 27
KNTR900M43A	890	960	10	43	10	45	2.5	28	3	150 x 90 x 27
KNTR900M47A	890	960	20	47	22	49	2.5	28	8	180 x 150 x 27
KNTR900M50A	890	960	25	50	27	52	3	28	15	200 x 160 x 27
KNTR1300M43A	1200	1400	10	43	10	45	2.5	28	3	150 x 100 x 22
KNTR1300M47A	1200	1400	20	47	22	49	2.5	28	7	160 x 120 x 22
KNTR1300M50A	1200	1400	25	50	27	52	3	28	16	180 x 150 x 22
KNTR1300M54A	1200	1400	10	54	45	54	2.5	50	10	200 x 150 x 22
KNTR1400M43A	1200	1600	10	43	10	45	3	28	5	150 x 120 x 22
KNTR1400M47A	1200	1600	20	47	22	49	3	28	8	160 x 150 x 22
KBTR2060M40A	2000	6000	10	40	30	40	3.5	28	3	180 x 90 x 22
KNTR2500M47A	2300	2700	12	47	10	49	3	28	8	160 x 120 x 22
KNTR2500M50A	2300	2700	20	50	22	52	3	48	13	180 x 150 x 22
KNTR3100M53A	2900	3300	2	53	25	53	3.5	48	10	180 x 90 x 22
KNTR5650M43A	5400	5900	1	43	25	43	3.5	45	3	120 x 80 x 22
KNTR9100M42A	9000	9200	5	42	30	42	3.5	50	1.5	120 x 80 x 22

LIMITING AMPLIFIERS

The series of products have the functions of compressing wide dynamic input power to narrow output power range. Keylink's limiting amplifiers use FET device with good consistency and distributed traveling wave amplifying circuit to design. Good amplitude and phase consistency characteristics can be achieved in a wide input dynamic range. The products have the characteristics of broadband, low noise, high gain. It's the key component of the electronic system, such as radar, communication, ECM, navigation, measurement and control, etc. KeyLink's limiting amplifiers can be categorized as follows.



Model No.	Frequency (MHz)		Input Power (dBm)	Limited Output Power (dBm)	Noise Figure (dB) Typ.	Harmonic Rejection (dBc) Typ.	VSWR In/Out	Power Type (Vdc) (mA)		Size (mm)
	Min.	Max.								
KLTA001002M50A	100	200	-50~+5	+10~+13	2.5	10	2.0:1	12	200	100 × 45 × 20
KLTA007012M55A	700	1200	-55~+10	+10~+13	3	10	2.0:1	12	250	120 × 45 × 20
KLTA010017M55A	1000	1700	-55~+10	+10~+13	3	10	2.0:1	12	250	120 × 45 × 20
KLTA003020M50A	300	2000	-50~+10	+9~+13	3.5	10	2.0:1	12	200	100 × 45 × 20
KLTA010020M60A	1000	2000	-60~+10	+10~+13	3.5	10	2.0:1	12	300	150 × 45 × 20
KLTA005025M50A	500	2500	-50~+10	+9~+13	3.5	10	2.0:1	12	200	100 × 45 × 20
KLTA020040M30A	2000	4000	-30~+10	+14~+18	4	12	2.0:1	12	350	75 × 30 × 20
KLTA020040M40A	2000	4000	-40~+10	+14~+18	4	12	2.0:1	12	400	90 × 30 × 20
KLTA020040M55A	2000	4000	-55~+10	+14~+18	4	12	2.0:1	12	500	105 × 30 × 20
KLTA020060M24A	2000	6000	-24~-12	+16~+19	4.5	12	2.0:1	12	300	60 × 55 × 19
KLTA020080M30A	2000	8000	-30~+10	+13~+18	4	12	2.0:1	12	350	75 × 30 × 20
KLTA020080M40A	2000	8000	-40~+10	+13~+18	4	12	2.0:1	12	400	90 × 30 × 20
KLTA020080M55A	2000	8000	-55~+10	+13~+18	4	12	2.0:1	12	500	105 × 30 × 20
KLTA040080M30A	4000	8000	-30~+10	+13~+17	4	12	2.0:1	12	350	75 × 30 × 20
KLTA040080M40A	4000	8000	-40~+10	+13~+17	4	12	2.0:1	12	400	90 × 30 × 20
KLTA040080M55A	4000	8000	-55~+10	+13~+17	4	12	2.0:1	12	500	105 × 30 × 20
KLTA060100M30A	6000	10000	-30~+10	+12~+16	4	12	2.0:1	12	350	75 × 30 × 20
KLTA060100M40A	6000	10000	-40~+10	+12~+16	4	12	2.0:1	12	400	90 × 30 × 20
KLTA060100M55A	6000	10000	-55~+10	+12~+16	4	12	2.0:1	12	500	105 × 30 × 20
KLTA080120M30A	8000	12000	-30~+10	+11~+15	4.5	12	2.0:1	12	350	75 × 30 × 20
KLTA080120M40A	8000	12000	-40~+10	+11~+15	4.5	12	2.0:1	12	400	90 × 30 × 20
KLTA080120M55A	8000	12000	-55~+10	+11~+15	4.5	12	2.0:1	12	500	105 × 30 × 20
KLTA020180M30A	2000	18000	-30~+10	+11~+18	5	12	2.0:1	12	400	75 × 30 × 20
KLTA020180M40A	2000	18000	-40~+10	+11~+18	5	12	2.0:1	12	450	90 × 30 × 20
KLTA020180M55A	2000	18000	-55~+10	+11~+18	5	12	2.0:1	12	500	105 × 30 × 20
KLTA060180M25A	6000	18000	-25~-13	+12~+16	5	13	2.0:1	12	400	63 × 30 × 20
KLTA060180M30A	6000	18000	-30~+10	+11~+17	5	12	2.0:1	12	350	75 × 30 × 20
KLTA060180M40A	6000	18000	-40~+10	+11~+17	5	12	2.0:1	12	400	90 × 30 × 20
KLTA060180M55A	6000	18000	-55~+10	+11~+17	5	12	2.0:1	12	500	105 × 30 × 20

LOW NOISE AMPLIFIERS

The series of products have the functions of providing low noise figure to guarantee higher receiving sensitivity of system. Keylink's low noise amplifiers typically exhibit noise figure below 5.5dB and output 1dB compression points over 8dBm. The products have the characteristics of broadband, low noise, high output P-1dB. These low noise amplifiers are economical choices for general purpose application. It's the key component of the electronic system, such as radar, communication, ECM, navigation, measurement and control, etc. KeyLink's low noise amplifiers can be categorized as follows.



Model No.	Frequency (MHz)		Gain (dB) Typ.	Gain Flatness (± dB)	Output P-1dB (dBm) Typ.	Noise Figure (dB) Typ.	VSWR In/Out	Power Type (Vdc) (mA)		Size (mm)
KLNA001005M20A	100	500	20	1.4	16	1.1	2.0:1	12	100	50 x 40 x 20
KLNA001020M20A	100	2000	20	1.8	15	1.7	2.0:1	12	200	50 x 40 x 20
KLNA005020M20A	500	2000	20	1.7	15	1.7	2.0:1	12	200	50 x 40 x 20
KLNA005020M30A	500	2000	30	1.7	15	1.7	2.0:1	12	250	60 x 40 x 20
KLNA015035M15A	1500	3500	15	1.5	15	2	2.0:1	12	200	50 x 40 x 20
KLNA020040M15A	2000	4000	15	0.8	15	1.7	2.0:1	12/-12	100/20	30 x 40 x 20
KLNA020040M30A	2000	4000	30	1.2	8	1.5	2.0:1	12	50	24 x 15 x 10
KLNA020060M15A	2000	6000	15	1	15	1.8	2.0:1	12/-12	100/20	30 x 40 x 20
KLNA020060M25A	2000	6000	25	1.2	10	1.6	2.0:1	12	60	24 x 15 x 10
KLNA010080M15A	1000	8000	15	1.2	15	2.2	2.0:1	12/-12	100/20	30 x 40 x 20
KLNA010080M30A	1000	8000	30	1.5	15	2.2	2.0:1	12/-12	150/20	40 x 40 x 20
KLNA005180M15A	500	18000	15	2	12	5	2.3:1	12/-12	100/20	30 x 40 x 20
KLNA005180M30A	500	18000	30	2	12	5	2.3:1	12/-12	200/20	40 x 40 x 20
KLNA010180M15A	1000	18000	15	1.8	12	4.8	2.0:1	12	100	24 x 15 x 10
KLNA010180M30A	1000	18000	30	1.8	12	4.8	2.0:1	12	200	30 x 15 x 10
KLNA020180M15A	2000	18000	15	1.5	12	4	2.0:1	12	100	24 x 15 x 10
KLNA020180M22A	2000	18000	22	1.5	15	4	2.0:1	12	250	30 x 15 x 10
KLNA060180M16A	6000	18000	16	1.5	12	2.5	2.3:1	12	150	24 x 15 x 10
KLNA060180M35A	6000	18000	35	2	17	2.7	2.3:1	12	250	30 x 15 x 10
KLNA180265M22A	18000	26500	22	1.5	10	2.5	2.3:1	12	100	20 x 15 x 10
KLNA200300M20A	20000	30000	20	1.4	9	3.5	2.3:1	12	100	20 x 15 x 10
KLNA180400M17A	18000	40000	17	2.5	9	5.5	2.3:1	12	150	20 x 15 x 10
KLNA265400M25A	26500	40000	25	2.3	10	4.5	2.5:1	12/-12	200/20	30 x 40 x 20

EQUALIZERS



The series of products are mainly designed to complement the original system transmission characteristics of the curve. The frequency range is covered by 0.5GHz~40GHz. Its characteristic curve can be designed into two types: positive and negative slope. The products have the characteristics of small size and high reliability. The products can be applied to all kinds of receiving and transmitting channels, high power traveling wave tubes, solid state power amplifiers, etc. KeyLink's equalizers can be categorized as follows.

Model No.	Frequency (MHz)		Equalizing Type	Insertion Loss (dB) Typ.	Equalizing Value (dB) Typ.	VSWR In/Out	Size (mm)
	Min.	Max.					
KEQU005020M02A	500	2000	Positive Slope	1.4	2	1.8:1	25 × 22 × 10
KEQU005020M04A	500	2000	Positive Slope	1.6	4	1.8:1	25 × 22 × 10
KEQU005020M06A	500	2000	Positive Slope	1.8	6	1.8:1	25 × 22 × 10
KEQU020060M02A	2000	6000	Positive Slope	1.5	2	1.8:1	20 × 16 × 10
KEQU020060M04A	2000	6000	Positive Slope	1.5	4	1.8:1	20 × 16 × 10
KEQU020120M04A	2000	12000	Positive Slope	2	4	1.8:1	20 × 16 × 10
KEQU020120M08A	2000	12000	Positive Slope	2	8	1.8:1	20 × 16 × 10
KEQU010180M04A	1000	18000	Positive Slope	2	4	1.8:1	20 × 16 × 10
KEQU010180M06A	1000	18000	Positive Slope	2.2	6	1.8:1	20 × 16 × 10
KEQU010180M08A	1000	18000	Positive Slope	2.5	8	1.8:1	20 × 16 × 10
KEQU060180M02A	6000	18000	Positive Slope	2	2	1.8:1	20 × 16 × 10
KEQU060180M04A	6000	18000	Positive Slope	2	4	1.8:1	20 × 16 × 10
KEQU060180M06A	6000	18000	Positive Slope	2.5	6	1.8:1	20 × 16 × 10
KEQU060180M08A	6000	18000	Positive Slope	2.5	8	1.8:1	20 × 16 × 10
KEQU180400M02A	18000	40000	Positive Slope	3	2	2.5:1	15 × 16 × 10
KEQU180400M04A	18000	40000	Positive Slope	3	4	2.5:1	15 × 16 × 10
KEQU180400M06A	18000	40000	Positive Slope	3	6	2.5:1	15 × 16 × 10
KEQU265400M04A	26500	40000	Positive Slope	4.5	4	2.5:1	15 × 16 × 10
KEQU265400M11A	26500	40000	Positive Slope	3	11	2.5:1	15 × 16 × 10

POWER DIVIDERS



The series of products are passive devices. The frequency range is covered by 0.5GHz~40GHz. The products have the characteristics of good amplitude and phase consistency and low insertion loss. The products can be applied to all kinds of receiving and transmitting channels. KeyLink's power dividers can be categorized as follows.

Model No.	Frequency (MHz)		Way Number	Insertion Loss (dB) Typ.	Isolation (dB) Typ.	Amplitude Balance (dB) Typ.	Phase Balance (°) Typ.	VSWR In/Out	Size (mm)
	Min.	Max.							
KDIV005020M04A	500	2000	4	0.8	18	± 0.4	± 5	1.6:1	70 × 60 × 10
KDIV010020M04A	1000	2000	4	0.8	18	± 0.4	± 5	1.6:1	70 × 60 × 10
KDIV020060M02A	2000	6000	2	0.5	18	± 0.3	± 3	1.5:1	30 × 20 × 10
KDIV020180M02A	2000	18000	2	1	15	± 0.5	± 5	2.0:1	48 × 28 × 10
KDIV060180M02A	6000	18000	2	0.8	15	± 0.4	± 4	1.6:1	30 × 20 × 10
KDIV180265M02A	18000	26500	2	1.5	15	± 0.5	± 8	2.0:1	30 × 14 × 10
KDIV180400M02A	18000	40000	2	2	10	± 1.1	± 10	2.3:1	30 × 14 × 10
KDIV180400M04A	18000	40000	4	3	10	± 1.2	± 12	2.3:1	31 × 20 × 10
KDIV265400M02A	26500	40000	2	2	11	± 1.0	± 9	2.3:1	30 × 14 × 10

MIXERS

The series of products are passive devices, which are the key units of microwave and RF up-conversion and down-conversion circuits. The products can be applied to all kinds of receiving and transmitting channels. KeyLink's mixers can be categorized as follows.



Model No.	RF&LO Frequency (MHz)		IF Frequency (MHz)		Conversion Loss (dB) Typ.	LO to RF Balance (dB) Typ.	LO to IF Balance (dB) Typ.	Input P-1dB (dBm) Typ.	Lo Drive Level (dBm)	Size (mm)
	Min.	Max.	Min.	Max.						
KMIX001005M06A	100	500	DC	500	6	45	40	9	13	40 x 35 x 12
KMIX001012M07A	100	1200	DC	1000	7	40	35	9	13	40 x 35 x 12
KMIX001025M08A	100	2500	10	1500	8	28	25	9	13	40 x 35 x 12
KMIX001030M09A	100	3000	10	1500	9	28	23	9	13	40 x 35 x 12
KMIX001040M10A	100	4000	10	3500	10	25	20	9	13	40 x 35 x 12
KMIX060180M10A	6000	18000	DC	6000	10	35	25	10	20	20 x 16 x 10
KMIX180400M13A	18000	40000	DC	18000	13	25	25	10	15	20 x 16 x 10
KMIX265400M13A	26500	40000	DC	18000	13	26	28	10	15	20 x 16 x 10
KMIX180500M15A	18000	50000	DC	18000	15	20	20	10	15	20 x 16 x 10

SWITCHES



The power supply voltage of the series products are $\pm 5V \pm 5\%$, which using TTL control (default "0": ON; "1": OFF.). The frequency range is covered by 0.5GHz~40GHz. The products have the characteristics of small size, high reliability, low insertion loss and high isolation. The products are applied to all kinds of receiving and transmitting channels. KeyLink's switches can be categorized as follows.

Model No.	Description	Frequency (MHz)		Insertion Loss (dB) Typ.	Isolation (dB) Typ.	ON VSWR In/Out	Switching Time (ns)	Power Type (Vdc) (mA)	Handling Power (W) Max.	Size (mm)
		Min.	Max.							
KSWA005180M01A	SPST Absorptive	500	18000	3.5	55	2.0:1	80	+5/-5 50/50	0.5	24 x 15 x 10
KSWA010180M01A	SPST Absorptive	1000	18000	3.2	60	2.0:1	80	+5/-5 50/50	0.5	24 x 15 x 10
KSWA060180M01A	SPST Absorptive	6000	18000	3	60	2.0:1	80	+5/-5 50/50	0.5	24 x 15 x 10
KSWA180400M01A	SPST Absorptive	18000	40000	5.5	50	2.5:1	50	+5/-5 20/20	0.1	24 x 15 x 10

Model No.	Description	Frequency (MHz) Min. Max.	Insertion Loss (dB) Typ.	Isolation (dB) Typ.	ON VSWR In/Out	Switching Time (ns)	Power Type (Vdc) (mA)	Handling Power (W) Max.	Size (mm)
KSWA265400M01A	SPST Absorptive	26500 40000	5.5	50	2.5:1	50	+5/-5 20/20	0.1	24 × 15 × 10
KSWR005020M01A	SPST Reflective	500 2000	1.5	50	2.0:1	80	+5/-5 50/50	1	24 × 15 × 10
KSWR010180M01A	SPST Reflective	1000 18000	2.8	50	2.0:1	80	+5/-5 50/50	1	24 × 15 × 10
KSWA005020M02A	SPDT Absorptive	500 2000	2	55	2.0:1	80	+5/-5 70/70	0.5	24 × 15 × 10
KSWA010180M02A	SPDT Absorptive	1000 18000	3.3	55	2.0:1	80	+5/-5 70/70	0.5	24 × 15 × 10
KSWA180265M02A	SPDT Absorptive	18000 26500	5	55	2.5:1	50	+5/-5 20/20	0.1	24 × 15 × 10
KSWA265400M02A	SPDT Absorptive	26500 40000	5.5	50	2.5:1	50	+5/-5 20/20	0.1	24 × 15 × 10
KSWR005020M02A	SPDT Reflective	500 2000	1.5	55	2.0:1	80	+5/-5 70/70	1	24 × 15 × 10
KSWR010180M02A	SPDT Reflective	1000 18000	3	60	2.0:1	80	+5/-5 70/70	1	24 × 15 × 10
KSWR180265M02A	SPDT Reflective	18000 26500	5	55	2.5:1	50	+5/-5 20/20	0.1	24 × 15 × 10
KSWR265400M02A	SPDT Reflective	26500 40000	5.5	50	2.5:1	50	+5/-5 20/20	0.1	24 × 15 × 10
KSWA005020M03A	SP3T Absorptive	500 2000	1.5	55	2.0:1	80	+5/-5 100/50	0.5	33 × 26 × 12
KSWA010180M03A	SP3T Absorptive	1000 18000	3.5	55	2.0:1	80	+5/-5 100/50	0.5	33 × 26 × 12
KSWR005020M03A	SP3T Reflective	500 2000	1.3	55	2.0:1	80	+5/-5 100/50	1	33 × 26 × 12
KSWR010180M03A	SP3T Reflective	1000 18000	3	55	2.0:1	80	+5/-5 100/50	1	33 × 26 × 12
KSWA005020M04A	SP4T Absorptive	500 2000	1.6	55	2.0:1	80	+5/-5 150/50	0.5	43 × 28 × 12
KSWA010180M04A	SP4T Absorptive	1000 18000	3.6	55	2.0:1	80	+5/-5 150/50	0.5	43 × 28 × 12

Model No.	Description	Frequency (MHz) Min. Max.	Insertion Loss (dB) Typ.	Isolation (dB) Typ.	ON VSWR In/Out	Switching Time (ns)	Power Type (Vdc) (mA)	Handling Power (W) Max.	Size (mm)
KSWR005020M04A	SP4T Reflective	500 2000	1.5	55	2.0:1	80	+5/-5 150/50	1	43 × 28 × 12
KSWR010180M04A	SP4T Reflective	1000 18000	3.3	55	2.0:1	80	+5/-5 150/50	1	43 × 28 × 12
KSWA005020M05A	SP5T Absorptive	500 2000	2	55	2.0:1	80	+5/-5 200/50	0.5	53 × 30 × 14
KSWA010180M05A	SP5T Absorptive	1000 18000	3.8	55	2.0:1	80	+5/-5 200/50	0.5	53 × 30 × 14
KSWR005020M05A	SP5T Reflective	500 2000	1.8	55	2.0:1	80	+5/-5 200/50	1	53 × 30 × 14
KSWR010180M05A	SP5T Reflective	1000 18000	3.7	55	2.0:1	80	+5/-5 200/50	1	53 × 30 × 14
KSWA005020M06A	SP6T Absorptive	500 2000	2.2	55	2.0:1	80	+5/-5 250/50	0.5	63 × 34 × 14
KSWA010180M06A	SP6T Absorptive	1000 18000	4.2	55	2.0:1	80	+5/-5 250/50	0.5	63 × 34 × 14
KSWR005020M06A	SP6T Reflective	500 2000	2.1	55	2.0:1	80	+5/-5 250/50	1	63 × 34 × 14
KSWR010180M06A	SP6T Reflective	1000 18000	4	55	2.0:1	80	+5/-5 250/50	1	63 × 34 × 14
KSWA005020M07A	SP7T Absorptive	500 2000	2.4	55	2.0:1	80	+5/-5 300/70	0.5	76 × 38 × 14
KSWA010180M07A	SP7T Absorptive	1000 18000	4.6	55	2.0:1	80	+5/-5 300/70	0.5	76 × 38 × 14
KSWR005020M07A	SP7T Reflective	500 2000	2.3	55	2.0:1	80	+5/-5 300/70	1	76 × 38 × 14
KSWR010180M07A	SP7T Reflective	1000 18000	4.3	55	2.0:1	80	+5/-5 300/70	1	76 × 38 × 14
KSWA010180M08A	SP8T Absorptive	1000 18000	4.8	55	2.0:1	80	+5/-5 400/100	0.5	88 × 38 × 14
KSWA005020M08A	SP8T Absorptive	500 2000	2.5	55	2.0:1	80	+5/-5 400/100	0.5	88 × 38 × 14
KSWR005020M08A	SP8T Reflective	500 2000	2.4	55	2.0:1	80	+5/-5 400/100	1	88 × 38 × 14
KSWR010180M08A	SP8T Reflective	1000 18000	4.5	55	2.0:1	80	+5/-5 400/100	1	88 × 38 × 14

DIGITAL ATTENUATORS



The products can be used in microwave electronic components. Its attenuation values are determined by the input TTL/LVTTL control signal. So that the link can be achieved the desired gain or loss value. KeyLink's digital attenuators can be categorized as follows.

Model No.	Frequency (MHz)		Insertion Loss (dB) Typ.	Attenuation Range (dB)	Attenuation Accuracy (dB) Typ.	Bits	Step (dB)	VSWR In/Out	Power Type (Vdc) (mA)		Size (mm)
	Min.	Max.									
KDAT001030M15A	100	3000	1.5	15	$\pm(0.40+4\% \times \text{ATT})$	4	1	2.0:1	5	20	28 x 24 x 16
KDAT001030M31A	100	3000	3	31.5	$\pm(0.40+5\% \times \text{ATT})$	6	0.5	2.0:1	5	20	36 x 24 x 16
KDAT001180M15A	100	18000	3.5	15	$\pm(0.50+4\% \times \text{ATT})$	4	1	2.0:1	-5	20	28 x 24x 16
KDAT001180M31A	100	18000	4	31.5	$\pm(0.50+5\% \times \text{ATT})$	6	0.5	2.0:1	-5	20	36 x 24 x 16
KDAT001180M35A	100	18000	3.5	35	$\pm(0.50+5\% \times \text{ATT})$	3	5	2.0:1	-5	20	24 x 24 x 16
KDAT180265M15A	18000	26500	3.5	15.5	$\pm(0.50+6\% \times \text{ATT})$	5	0.5	2.2:1	-5	20	32 x 24 x 16
KDAT265400M15A	26500	40000	4	15.5	$\pm(0.50+6\% \times \text{ATT})$	5	0.5	2.3:1	-5	20	32 x 24 x 16

LIMITERS



The series of products' limiting ability can be achieved by the diode conduction and cut-off characteristics. The frequency range covered by 0.5GHz~40GHz. The products have the characteristics of low insertion loss, small size and high reliability. The products can be applied to receiving channel low noise amplifier protection in radar system. KeyLink's limiters can be categorized as follows.

Model No.	Frequency (MHz)		Small Signal Insertion Loss (dB) Typ.	CW Power (W) Max.	Peak Power (W) Max.	CW Leakage Power (dBm) Typ.	VSWR In/Out	Size (mm)
	Min.	Max.						
KLIM005020M10A	500	2000	1.3	10	200	16	1.5:1	26 x 24 x 10
KLIM020060M05A	2000	6000	1.7	5	200	15	1.8:1	20 x 16 x 10
KLIM020180M02A	2000	18000	2.5	2	200	16	2.2:1	20 x 16 x 10
KLIM060180M02A	6000	18000	2.5	2	200	15	2.2:1	20 x 16 x 10
KLIM180260M01A	18000	26000	2	1	-	17	2.0:1	15 x 16 x 10
KLIM340360M01A	34000	36000	2	1.5	-	15	2.2:1	15 x 16 x 10

RECEIVING FRONT END ASSEMBLIES



The series of products have the functions of limiting, filtering, amplifying, switching, digital attenuation and self-checking. The frequency range is covered by 0.5GHz~40GHz. The products have the characteristics of good amplitude and phase consistency, and good limiting ability. Good electromagnetic shielding and EMI filtering makes the products strong anti-interference ability. The products can be applied to all kinds of receiving and transmitting channels. KeyLink's receiving front end assemblies can be categorized as follows.

Model No.	KFEA005020 M20A	KFEA020060 M30A	KFEA060180 M30A	KFEA180265 M20A	KFEA265400 M20A
Frequency (MHz)	500-2000	2000-6000	6000-18000	18000-26500	26500-40000
Channel Number	4	4	4	1	1
Gain(dB)Typ.	20	30	30	20	20
Gain Flatness(± dB) Typ	1.5	2	2.5	2.5	3
Limiting input power(w) (CW 1min)	10	10	5	1	1
Output P-1dB(dBm) Typ	10	10	10	10	10
Noise Figure (dB) Typ.	4	5	6	7	8
VSWR In/Out	2.0:1	2.0:1	2.3:1	2.5:1	2.5:1
Attenuation Range/Step(dB)	30/1	35/5	35/5	35/5	35/5
Harmonic Rejection @-30dBm input power(dBc)	- 60	-40	-40	- 60	- 60
Power Type (Vdc) (A)	+12/-12 1.0/0.2	+12/-12 1.4/0.2	+12/-12 1.4/0.2	+12/-12 0.6/0.1	+12/-12 0.6/0.1
Size(mm)	200×100×20	160×100×20	160×100×20	100×40×20	100×40×20

FREQUENCY SYNTHESIZERS



The series of products achieve the signal output using external or internal reference by the phase locked way, and using the method of subsection filtering to enhance harmonic and spurious suppression. The frequency range is covered by 0.5GHz~42GHz. The products have the characteristics of small size, high reliability. Good electromagnetic shielding and EMI filtering makes the products strong anti-interference ability. The products can be applied to all kinds of receiving and transmitting channels. KeyLink's frequency synthesizers can be categorized as follows.

Model No.	KBFS005020 M10A	KBFS020060 M10A	KBFS060180 M50A	KBFS180280 M50A	KBFS280420 M50A
Output Frequency (MHz)	500-2000	2000-6000	6000-18000	18000-28000	28000-42000
Step Size (MHz)	10	10	50	50	50
Output Power (dBm)	-30~0	-30~0	-30~0	-30~0	-30~0
Spurious Rejection(dBc) Typ.	70	70	70	70	70
Harmonic Rejection (dBc) Typ.	50	50	50	50	50
Phase Noise @1KHz(dBc/Hz)	-110	-100	-85	-75	-65
Hopping Time(μs) Typ.	200	200	200	200	200
Power Supply (Vdc) (A)	12 0.5	12 0.5	24 1	24 1	24 1
Size(mm)	200×100×20	200×100×20	200×100×20	240×160×30	240×160×30

FREQUENCY CONVERTER ASSEMBLIES

The frequency conveter assemblies are applied to the microwave electronic components, including up-conversion modules, down-conversion modules and up and down conversion modules. The excellent noise figure of the down-converter ensures the receiving sensitivity of the components, and the low harmonic and spurious signals ensure the correct demodulation of the main signal. The output power of the up-converter is optional. The products can also be composed of multi-channel frequency conversion modules. The products can be applied to all kinds of microwave, RF communication, radar, navigation, etc. KeyLink's frequency converter assemblies can be categorized as follows.



Model No.	KDWC005 020M30A	KDWC020 060M30A	KDWC060 180M30A	KDWC180 280M30A	KDWC280 400M30A	KUPC060 180M30A	KUPC180 280M30A	KUPC280 400M30A
Input Frequency (MHz)	500-2000	2000-6000	6000-18000	18000-28000	28000-40000	1300-2300	6000-16000	6000-18000
Output Frequency (MHz)	550-950	550-950	550-950	550-950	550-950	6000-18000	18000-28000	28000-40000
Gain (dB) Typ.	30	30	30	30	30	30	30	30
Gain Flatness (± dB)	1.5	2	2.5	2.8	3	3	2	2
Output P-1dB(dBm) Typ	10	10	10	10	10	10	15	15
VSWR In/Out	2.0:1	2.0:1	2.3:1	2.5:1	2.5:1	2.3:1	2.5:1	2.5:1
Spurious Rejection (dBc)Typ.	55	55	55	55	55	35	35	35
Harmonic Rejection (dBc) Typ.	55	55	55	55	55	35	35	35
Power Type (Vdc) (A)	12 1.2	12 1.5	12 1.5	12 1.5	12 1.5	12 0.8	12 1	12 1
Size(mm)	6U,4HP	6U,4HP	6U,4HP	6U,4HP	6U,4HP	6U,4HP	160x120x32	160x120x32



Motto

Honesty Cooperation Win-Win

Purpose

Focus on your application

Mission

Being the most professional supplier of microwave and RF products

Vision

A global leader in the area of microwave and RF applications