

# AMPLIFIER SELECTION GUIDE

	MODEL NO.	FREQ. [MHz]		GAIN [dB] MIN.	MAX <sup>(1)</sup> POWER [dBm]	N.F. [dB] TYP.	3rd ORDER I.P. [dBm]		VSWR <sup>(2)</sup>		DC POWER		CASE STYLE	STD. CONN.	OPTION
		f <sub>L</sub>	f <sub>U</sub>				IN	OUT	V VOLT	I [mA]					
PIN	ERA-1	DC-8000		9.0	+12.0	4.3	+26.0	1.5:1	1.5:1	+3.4	40	VV105			
	ERA-2	DC-6000		13.0	+13.0	4.0	+26.0	1.3:1	1.2:1	+3.4	40	VV105			
	ERA-3	DC-3000		16.0	+12.5	3.5	+25.0	1.5:1	1.4:1	+3.2	35	VV105			
	ERA-4	DC-4000		11.0	+17.3	4.2	+34.0	1.2:1	1.3:1	+4.5	65	VV105			
	ERA-5	DC-4000		16.0	+18.4	4.3	+32.5	1.3:1	1.3:1	+4.9	65	VV105			
	ERA-6	DC-4000		10.5	+17.9	4.5	+36.0	1.3:1	1.6:1	+5.0	70	VV105			
MONOLITHIC • SURFACE MOUNT	ERA-1SM	DC-8000		9.0	+12.0	4.3	+26.0	1.5:1	1.5:1	+3.4	40	WW107			
	ERA-2SM	DC-6000		13.0	+13.0	4.0	+26.0	1.3:1	1.2:1	+3.4	40	WW107			
	ERA-21SM	DC-8000		11.2	+12.6	4.7	+26.0	1.1:1	1.3:1	+3.5	40	WW107			
	ERA-3SM	DC-3000		16.0	+12.5	3.5	+25.0	1.5:1	1.4:1	+3.2	35	WW107			
	ERA-33SM	DC-3000		15.0	+13.5	3.9	+28.5	1.6:1	1.25:1	+4.3	40	WW107			
	ERA-4SM	DC-4000		11.0	+17.3	4.2	+34.0	1.2:1	1.3:1	+4.5	65	WW107			
	ERA-4XSM	DC-4000		12.0	+15.0	4.2	+35.0	1.2:1	1.2:1	+4.5	65	WW107			
	ERA-5SM	DC-4000		16.0	+18.4	4.3	+32.5	1.3:1	1.2:1	+4.9	65	WW107			
	ERA-5XSM	DC-4000		16.0	+16.5	3.5	+33.0	1.2:1	1.2:1	+4.9	65	WW107			
	ERA-50SM	DC-1500		16.0	+17.2	3.5	+32.5	1.3:1	1.2:1	+4.4	60	WW107			
	ERA-51SM	DC-4000		14.0	+18.1	4.1	+33.0	1.1:1	1.2:1	+4.5	65	WW107			
	ERA-6SM	DC-4000		10.5	+17.9	4.5	+36.0	1.3:1	1.6:1	+5.0	70	WW107			
	ERA-8SM	DC-2000		17.0	+12.5	3.1	+25.0	1.4:1	1.8:1	+3.7	36	WW107			
	Gali-1	DC-8000		9.0	+10.5	4.5	+27.0	1.3:1	1.4:1	+3.4	40	DF782			
	Gali-19	DC-7000		9.6	+9.0	6.5	+23.7	1.6:1	1.5:1	+3.6	40	DF782			
	Gali-2	DC-8000		12.0	+11.0	4.6	+27.0	1.6:1	1.6:1	+3.5	40	DF782			
	Gali-21	DC-8000		11.5	+10.5	4.0	+27.0	1.1:1	1.3:1	+3.5	40	DF782			
	Gali-29	DC-7000		12.7	+10.0	6.0	+24.7	1.5:1	1.5:1	+3.6	40	DF782			
	Gali-3	DC-3000		17.5	+10.5	3.5	+25.0	1.5:1	1.2:1	+3.3	35	DF782			
	Gali-33	DC-4000		16.0	+11.4	3.9	+28.0	1.6:1	1.2:1	+4.3	40	DF782			
	Gali-39	DC-7000		17.7	+9.0	4.9	+22.9	1.6:1	1.5:1	+3.5	35	DF782			
	Gali-4	DC-4000		11.0	+16.0	4.0	+34.0	1.2:1	1.4:1	+4.6	65	DF782			
	Gali-4F	DC-4000		11.0	+13.8	4.0	+32.0	1.2:1	1.5:1	+4.4	50	DF782			
	Gali-49	DC-5000		11.5	+15.0	5.5	+33.3	1.7:1	1.5:1	+5.0	65	DF782			
	Gali-5	DC-4000		16.0	+16.0	3.5	+35.0	1.2:1	1.4:1	+4.4	65	DF782			
	Gali-5F	DC-4000		15.5	+14.2	3.5	+31.5	1.2:1	1.4:1	+4.3	50	DF782			
	Gali-51	DC-4000		14.0	+16.5	3.5	+35.0	1.3:1	1.5:1	+4.5	65	DF782			
	Gali-51F	DC-4000		14.0	+14.4	3.5	+32.0	1.2:1	1.5:1	+4.4	50	DF782			
	Gali-52	DC-2000		16.0	+13.5	2.7	+32.0	1.35:1	1.4:1	+4.4	50	DF782			
	Gali-55	DC-4000		17.0	+13.5	3.3	+28.5	1.25:1	1.3:1	+4.3	50	DF782			
	Gali-59	DC-5000		16.3	+16.5	4.3	+33.3	1.6:1	1.5:1	+4.8	65	DF782			
	Gali-6	DC-4000		10.0	+16.5	4.5	+35.5	1.5:1	1.8:1	+5.0	70	DF782			
	Gali-6F	DC-4000		10.0	+14.3	4.5	+35.5	1.5:1	1.9:1	+4.8	50	DF782			
	Gali-S66	DC-3000		15.0	+1.0	2.7	+18.0	1.25:1	1.7:1	+3.5	16	DF782			
	Gali-74	DC-1000		20.0	+17.3	2.7	+38.0	1.2:1	1.6:1	+4.8	80	DF782			
	HELA-10	50-1000		10.5	+30.0	3.5	+47.0	1.22:1	1.22:1	+12.0	525	CM624			
	LEE-19	DC-8000		9.6	+10.2	6.5	+24.5	1.5:1	1.4:1	+3.6	40	FG873			
	LEE-29	DC-8000		13.3	+10.9	5.5	+25.5	1.4:1	1.3:1	+3.6	40	FG873			
	LEE-39	DC-8000		18.5	+10.4	4.5	+23.4	1.3:1	1.3:1	+3.5	35	FG873			
	LEE-49	DC-5000		12.0	+16.4	5.5	+33.0	1.6:1	1.4:1	+4.9	65	FG873			
	LEE-59	DC-5000		17.8	+17.3	4.5	+33.0	1.5:1	1.5:1	+4.8	65	FG873			
	MAR-1SM	DC-1000		13.0	+1.5	5.5	+14.0	1.3:1	1.3:1	+5.0	17	WW107			
	MAR-2SM	DC-2000		8.5	+4.5	6.5	+17.0	1.3:1	1.4:1	+5.0	25	WW107			
	MAR-3SM▼	DC-2000		8.0	+10.0	6.0	+23.0	1.5:1	1.7:1	+5.0	35	WW107			
	MAR-4SM	DC-1000		7.0	+12.5	6.5	+25.5	1.6:1	2.0:1	+5.3	50	WW107			
	MAR-6SM▼	DC-2000		9.0	+2.0	3.0	+14.5	1.5:1	1.4:1	+3.5	16	WW107			
	MAR-7SM▼	DC-2000		8.5	+5.5	5.0	+19.0	1.4:1	1.5:1	+4.0	22	WW107			
	MAR-8SM	DC-1000		19.0	+12.5	3.3	+27.0	3.1:1	3.1:1	+7.8	36	WW107			
	MAV-11SM	50-1000		9.0	+17.5	3.6	+30.0	1.5:1	1.7:1	+5.5	60	RRR137			
	MAV-11A	50-2000		9.0	+18.5	4.8	+35.0	1.4:1	1.1:1	+5.5	60	DH820			
	MERA-533	DC-4000		16	+16.5	3.5	+35	1.4:1	1.5:1	+4.9	65	DL805			
	MERA-556	DC-2200		16.0	+16.5	3.5	+35	1.2:1	1.4:1	+4.9	65	DL1020			
	MERA-7433	DC-1000		20.0	+18.0	2.7	+36	1.25:1	1.8:1	+4.8	80	DL805			
	MERA-7456	DC-1000		20.0	+18.0	2.7	+36	1.3:1	2.0:1	+4.8	80	DL1020			
	MNA-2	500-2500		10.3	+17.7	5.4	+28.0	1.5:1	1.6:1	+5.0	76	DQ849			
	MNA-3	500-2500		13.0	+11.4	4.9	+21.3	1.9:1	1.5:1	+5.0	30	DQ849			
	MNA-4	500-2500		14.0	+19.0	4.8	+29.0	1.5:1	1.7:1	+5.0	75	DQ849			
	MNA-5	500-2500		17.0	+12.2	3.5	+21.0	1.6:1	1.9:1	+5.0	28	DQ849			
	MNA-6	500-2500		21.5	+18.0	2.9	+28.0	1.5:1	1.6:1	+5.0	81	DQ849			
	MNA-7	1500-5900		15.0	+15.9	6.9	+28.6	2.0:1	1.5:1	+5.0	73	DQ849			
	RAM-1	DC-1000		13.0	+1.5	5.5	+14.0	1.3:1	1.3:1	+5.0	17	AF190			
	RAM-2	DC-2000		8.5	+4.5	6.5	+17.0	1.2:1	1.4:1	+5.0	25	AF190			
	RAM-3	DC-2000		8.0	+10.0	6.0	+23.0	1.6:1	1.7:1	+5.0	35	AF190			
	RAM-4	DC-1000		7.0	+12.5	6.5	+25.5	1.4:1	1.9:1	+5.3	50	AF190			
	RAM-6	DC-2000		9.0	+2.0	2.8	+14.5	1.4:1	1.3:1	+3.5	16	AF190			
	RAM-7	DC-2000		8.5	+5.5	4.5	+19.0	2.0:1	1.8:1	+4.0	22	AF190			
	RAM-8	DC-1000		19.0	+12.5	3.0	+27.0	3.1:1	3.1:1	+7.8	36	AF190			
	VNA-21	500-2500		12.6	+8.5	6.4	+20.0	1.4:1	1.3:1	+5.0	31	XX211			
	VNA-22	500-2500		11.8	+17.0	6.7	+29.0	1.6:1	1.4:1	+5.0	80	XX211			
	VNA-23	500-2500		15.4	+10.0	4.7	+21.0	1.5:1	1.3:1	+5.0	32	XX211			
	VNA-25	500-2500		16.0	+18.2	5.5	+29.0	1.5:1*	1.6:1	+5.0	85	XX211			
	VNA-28	500-2500		19.7	+11.0	3.7	+22.0	1.6:1	1.5:1	+5.0	33	XX211			

VAR. GAIN	MODEL NO.	FREQ. [MHz] f <sub>L</sub> f <sub>U</sub>	GAIN [dB] MIN.	MAX <sup>(1)</sup> POWER [dBm]	N.F. [dB] TYP.	3rd ORDER I.P. [dBm]	VSWR <sup>(2)</sup>		DC POWER		CASE STYLE	STD. CONN.	OPTION
							IN	OUT	V VOLT	I [mA]			
CON	ZFL-1000G	10-1000	17.0	+3.0	12.0	+13.0	2.0:1	2.0:1	+15.0	100	Y39	SMA	—
	ZFL-1000GH	10-1200	24.0	+13.0	15.0	+25.0	2.2:1	2.0:1	+15.0	170	Y39	SMA	—
PIN	AMP-76	5-500	26.0	+13.5	3.1	+28.0	2.0:1	2.0:1	+15.0	71	PP120		
	AMP-77	5-500	15.0	+16.0	3.3	+32.0	2.0:1	2.0:1	+15.0	56	PP120		
	AMP-75	5-500	19.0	+12.0	2.4	+28.0	2.0:1	2.0:1	+15.0	31	PP120		
	AMP-15	5-1000	13.0	+8.0	2.8	+22.0	2.0:1	2.0:1	+15.0	29	PP120		
	MAN-1HLN	10-500	10.0	+15.0	3.7	+30.0	1.8:1	1.8:1	+12.0	70	A06		
	MAN-1LN	0.5-500	28.0	+8.0	2.8	+18.0	1.8:1	1.8:1	+12.0	60	A05		
CON	TO-0812LN	800-1200	20.0	+8.0	1.2	+22.5	2.5:1	2.5:1	+15.0	70	QQ96		
	TO-1217LN	1200-1700	20.0	+10.0	1.6	+25.0	2.5:1	2.5:1	+15.0	70	QQ96		
	TO-1724LN	1700-2400	20.0	+10.0	1.6	+22.0	2.5:1	2.5:1	+15.0	70	QQ96		
LOW NOISE (N.F. <4.0 dB)	ZFL-500LN	0.1-500	24.0	+5.0	2.9	+14.0	1.5:1	1.6:1	+15.0	60	Y39	SMA	BNC
	ZFL-1000LN	0.1-1000	20.0	+3.0	2.9	+14.0	1.5:1	2.0:1	+15.0	60	Y39	SMA	—
	ZFL-500HLN	10-500	19.0	+16.0	3.8	+30.0	1.5:1	1.5:1	+15.0	110	Y39	SMA	—
	ZEL-0812LN	800-1200	20.0	+8.0	1.5	+18.0	2.5:1	2.5:1	+15.0	70	EEE132	SMA	—
	ZHL-0812HLN	800-1200	30.0	+26.0	1.5	+36.0	2.4:1	2.4:1	+15.0	725	NN92	SMA	—
	ZHL-0812MLN	800-1200	28.0	+20.0	1.3	+33.0	1.5:1	1.6:1	+15.0	300	S32	SMA	—
	ZEL-1217LN	1200-1700	20.0	+10.0	1.5	+25.0	2.5:1	2.5:1	+15.0	70	EEE132	SMA	—
	ZHL-1217HLN	1200-1700	30.0	+26.0	1.5	+36.0	2.4:1	2.4:1	+15.0	725	NN92	SMA	—
	ZHL-1217MLN	1200-1700	30.0	+20.0	1.2	+34.0	1.5:1	1.6:1	+15.0	300	S32	SMA	—
	ZEL-1724LN	1700-2400	20.0	+10.0	1.5	+22.0	2.5:1	2.5:1	+15.0	70	EEE132	SMA	—
	ZHL-1724HLN	1700-2400	30.0	+26.0	1.5	+36.0	2.4:1	2.4:1	+15.0	725	NN92	SMA	—
	ZHL-1724MLN	1700-2400	28.0	+20.0	1.2	+32.0	1.5:1	1.6:1	+15.0	300	S32	SMA	—
	ZQL-900LNW	800-900	13.0	+21.0	1.0	+35.0	1.2:1	1.1:1	+15.0	160	CW686	SMA	—
	ZQL-900MLNW	800-900	22.0	+23.0	1.2	+41.0	1.3:1	1.4:1	+15.0	230	CW686	SMA	—
	ZQL-900LN	824-849	15.0	+21.0	1.0	+35.0	1.2:1	1.1:1	+15.0	160	CW686	SMA	—
	ZQL-900MLN	824-849	25.5	+24.5	1.0	+41.0	1.3:1	1.4:1	+15.0	230	CW686	SMA	—
	ZQL-1900LNW	1700-2000	14.0	+18.5	0.9	+37.0	1.15:1	1.25:1	+15.0	160	CW686	SMA	—
	ZQL-1900MLNW	1800-2000	23.0	+25.0	1.1	+41.0	1.4:1	1.25:1	+15.0	310	CW686	SMA	—
	ZQL-1900LN	1850-1910	15.0	+19.0	0.9	+37.0	1.15:1	1.25:1	+15.0	160	CW686	SMA	—
	ZQL-1900MLN	1850-1910	25.0	+26.0	1.1	+41.0	1.25:1	1.20:1	+15.0	310	CW686	SMA	—
ZQL-2700MLNW	2200-2700	25.0	+25.0	1.0	+38.0	1.25:1	1.15:1	+15.0	325	CW686	SMA	—	
ZQLSC-1100	600-1100	19.0	+16.0	0.6	+34.0	1.8:1	1.8:1	+24.0	185	GZ1067	SMA	—	
ZQLSC-2400	1400-2400	12.0	+17.0	0.9	+35.0	1.6:1	1.7:1	+24.0	185	GZ1067	SMA	—	
ZX60-3011	400-3000	10.0	+19.0	1.6	+31.0	1.7:1	1.6:1	+12.0	120	GC957	SMA	—	
PIN	MAN-2AD	2-1000	9.0	-3.5	6.5	+14.0	2.0:1	2.0:1	+15.0	22	A05		
	MAN-11AD	2-2000	8.0	-3.5	6.5	+14.0	3.0:1	2.0:1	+15.0	22	A05		
	MAN-1AD	5-500	16.0	+7.0	7.2	+20.0	1.6:1	1.7:1	+12.0	85	A05		
CON	ZFL-2AD	2-1000	9.0	-3.5	6.5	+14.0	2.0:1	2.0:1	+15.0	22	Y39	SMA	—
	ZFL-11AD	2-2000	8.0	-3.5	6.5	+14.0	2.5:1	2.0:1	+15.0	22	Y39	SMA	—
	ZFL-1HAD	10-500	10.0	+20.0	7.5	+30.0	1.3:1	1.35:1	+15.0	115	SS98	SMA	—
	ZFL-2HAD	50-1000	11.0	+20.0	5.0	+33.0	2.0:1	2.0:1	+15.0	110	SS98	SMA	—
	ZHL-1HLD	225-400	23.0	+27.0	2.5	+40.0	2.0:1	2.0:1	+24.0	525	T34	SMA	—
	ZX60-2510M	500-2500	10.4	+17.1	5.4	+28.8	1.5:1	1.6:1	+5.0	95	GC957	SMA	—
ZX60-2514M	500-2500	14.0	+18.3	4.8	+30.3	1.5:1	1.7:1	+5.0	90	GC957	SMA	—	
ZX60-2522M	500-2500	21.5	+19.2	3.0	+30.6	1.5:1	1.7:1	+5.0	95	GC957	SMA	—	
ZX60-5916M	1500-5900	15.5	+14.5	6.4	+28.3	2.2:1	1.2:1	+5.0	96	GC957	SMA	—	
PIN	AMP-25G	10-2500	16.0	+12.0	3.5	+24.0	1.6:1	1.2:1	+15.0	55	PP120		
	MAN-1	0.5-500	28.0	+8.0	4.5	+18.0	1.8:1	1.8:1	+12.0	60	A05		
	MAN-2	0.5-1000	18.0	+9.0	6.0	+19.0	1.8:1	1.8:1	+12.0	85	A05		
	AMP-3G	30-3000	8.0	+9.5	3.5	+20.0	2.6:1	2.5:1	+15.0	55	PP230		
CON	ZFL-500	0.05-500	20.0	+9.0	5.3	+18.0	1.9:1	1.9:1	+15.0	60	Y460	SMA	BNC
	ZFL-1000	0.1-1000	17.0	+9.0	6.0	+18.0	1.5:1	2.0:1	+15.0	105	Y460	SMA	—
	ZFL-750	0.2-750	18.0	+9.0	6.0	+18.0	1.5:1	2.0:1	+15.0	90	Y460	SMA	—
ZJL-7G	20-7000	7.5	+9.0	5.0	+24.0	1.5:1	1.5:1	+12.0	50	BW459	SMA	—	
ZJL-6G	20-6000	10.0	+10.0	4.5	+24.0	1.5:1	1.4:1	+12.0	50	BW459	SMA	—	
ZJL-3G	20-3000	14.0	+8.0	3.8	+22.0	1.4:1	1.6:1	+12.0	45	BW459	SMA	—	

<sup>(1)</sup> Minimum output power at 1 dB gain compression. For LEE, MNA, VNA, ZX60-M models, typical.  
<sup>(2)</sup> For ERA, Gali, LEE, VAM-77 models, VSWR given as DC-3GHz; ERA-50SM DC-1.5 GHz; ERA-8SM DC-1GHz. For MNA and VNA models, VSWR given as 750-2500 MHz, except MNA-7 which is 2.5-5.9 GHz.

- Surface Mount.
- ▼ Alternate package style SOT 143, see VAM series.

\* Increase below 1500 MHz.  
 Using the Selection Guide:  
 Locate the Mini-Circuits' amplifier best suited for your particular application quickly with this convenient Selection Guide. Amplifiers are grouped into ten major categories and then listed in the sequence of frequency span. If your amplifier requirements are not met by the catalog models listed, we encourage you to contact our Application Engineering Department. You will find them courteous and eager to support your needs with their depth of knowledge coupled with our extensive database on engineering and catalog models.

See next page for continuation of Amplifier Selection Guide.

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	MODEL NO.	FREQ. [MHz]		GAIN [dB] MIN.	MAX <sup>[1]</sup> POWER [dBm]	N.F. [dB] TYP.	3rd ORDER I.P. [dBm]		VSWR <sup>[2]</sup>		DC POWER		CASE STYLE	STD. CONN.	OPTION
		f <sub>L</sub>	f <sub>U</sub>				IN	OUT	V VOLT	I [mA]					
MEDIUM POWER	PIN	AMP-2000	10-2000		20.0	+15.0	5.0	+25.0	2.0:1	2.0:1	+150.0	100	QQ96		
	CON	ZHL-6A	.0025-500		21.0	+23.0	9.5	+34.0	1.8:1	2.0:1	+24.0	350	S32	BNC	—
		ZFL-1000H	10-1000		28.0	+20.0	5.0	+33.0	2.0:1	2.0:1	+15.0	150	SS98	SMA	—
		ZFL-1000VH	10-1000		20.0	+25.0	4.5	+38.0	2.0:1	2.5:1	+15.0	320	SS98	SMA	—
		ZFL-1000VH2	10-1000		26.0	+25.0	5.0	+38.0	2.0:1	2.5:1	+15.0	320	SS98	SMA	—
		ZFL-2000	10-2000		20.0	+16.0	7.0	+25.0	2.0:1	2.0:1	+15.0	120	SS98	SMA	—
		ZFL-2500	500-2500		28.0	+15.0	8.0	+27.0	2.5:1	2.5:1	+5.0	220	Y460	SMA	—
		ZFL-2500VH	10-2500		20.0	+24.0	5.5	+35.0	1.7:1	2.0:1	+15.0	300	SS98	SMA	—
		ZHL-1042J	10-2000		25.0	+20.0	4.5	+30.0	2.5:1	2.5:1	+15.0	300	NN92	SMA	—
		ZJL-4G	20-4000		10.0	+11.0	5.5	+30.5	1.4:1	1.6:1	+12.0	75	BW459	SMA	—
		ZJL-4HG	20-4000		13.0	+12.0	4.5	+30.5	1.5:1	1.4:1	+12.0	75	BW459	SMA	—
		ZJL-5G	20-5000		7.0	+9.5	8.5	+32.0	1.6:1	1.3:1	+12.0	80	BW459	SMA	—
		ZKL-2R7	10-2000		20.0	+11.0	5.0	+30.0	1.3:1	1.4:1	+12.0	120	BY493	SMA	—
		ZKL-2R5	10-2000		26.0	+15.0	5.0	+31.0	1.4:1	1.4:1	+12.0	120	BY493	SMA	—
		ZKL-2	10-2000		30.0	+15.0	4.0	+31.0	1.4:1	1.4:1	+12.0	120	BY493	SMA	—
ZKL-1R5	10-1500		36.0	+15.0	3.0	+31.0	1.4:1	1.6:1	+12.0	115	BY493	SMA	—		
ZRON-8G	2000-8000		20.0	+20.0	6.0	+30.0	2.0:1	2.0:1	+15.0	310	AV243	SMA	—		
MEDIUM HIGH POWER	CON	ZHL-32A	.05-130		25.0	+29.0	10.0	+38.0	2.0:1	2.0:1	+24.0	600	S32	BNC	SMA,N
		ZHL-3A	.4-150		24.0	+29.5	11.0	+38.0	2.0:1	2.0:1	+24.0	600	S32	BNC	SMA,N
		ZHL-1A	2-500		16.0	+28.0	11.0	+38.0	2.0:1	2.0:1	+24.0	600	S32	BNC	SMA,N
		ZHL-450-75	5-450		9.3	+26.0	3.5	+48.0	2.5:1	1.6:1	+12.0	525	S32	BNC	—
		ZHL-1010-75	50-1000		9.5	+26.0	3.5	+47.0	1.5:1	1.5:1	+12.0	525	S32	BNC	—
		ZHL-2	10-1000		16.0	+29.0	9.0	+38.0	2.0:1	2.0:1	+24.0	600	T34	BNC	SMA,N
		ZHL-2-8	10-1000		27.0	+29.0	10.0	+38.0	2.0:1	2.0:1	+24.0	600	T34	BNC	SMA,N
		ZHL-2-12	10-1200		24.0	+29.0	4.0	+38.0	2.0:1	2.0:1	+24.0	750	T34	SMA	—
		ZHL-1010	50-1000		9.5	+26.0	3.5	+46.0	1.5:1	1.5:1	+12.0	525	S32	SMA	—
		ZHL-2010	50-1000		20.0	+26.0	3.7	+46.0	1.5:1	1.5:1	+12.0	900	S32	SMA	—
		ZHL-3010	50-1000		30.0	+26.0	5.5	+46.0	2.0:1	1.6:1	+12.0	1000	S32	SMA	—
		ZHL-42W	10-4200		30.0	+28.0	8.0	+38.0	2.5:1	2.5:1	+15.0	880	U36	SMA	—
		ZHL-4240W	10-4200		40.0	+28.0	8.0	+38.0	2.5:1	2.5:1	+15.0	900	U36	SMA	—
		ZHL-42	700-4200		30.0	+28.0	10.0	+38.0	2.5:1	2.5:1	+15.0	880	U36	SMA	—
		ZHL-211	800-950		20.0	+29.0	8.0	+38.0	1.8:1	1.8:1	+24.0	600	T34	BNC	SMA
		ZHL-4240	700-4200		40.0	+28.0	8.0	+38.0	2.5:1	2.5:1	+15.0	900	U36	SMA	—
		ZRL-400	150-400		27.0	+23.5	2.5	+42.0	1.25:1	1.35:1	+12.0	550	FJ893	SMA	—
		ZRL-700	250-700		27.0	+23.5	2.0	+46.0	1.20:1	1.30:1	+12.0	550	FJ893	SMA	—
		ZRL-1150LN	500-1400		31.0	+22.0	1.0	+40.0	1.25:1	1.25:1	+12.0	550	FJ893	SMA	—
		ZRL-1200	850-1200		25.0	+23.5	2.0	+46.0	1.2:1	1.25:1	+12.0	550	FJ893	SMA	—
ZRL-2150	950-2150		22.5	+17.5	1.5	+33.0	1.3:1	1.2:1	+12.0	300	FJ893	SMA	—		
ZRL-2300	1400-2300		21.0	+23.0	2.5	+46.0	1.2:1	1.16:1	+12.0	550	FJ893	SMA	—		
ZRL-2400LN	1000-2400		27.6	+21.0	1.0	+45.0	1.25:1	1.1.3:1	+12.0	550	FJ893	SMA	—		
ZVE-8G	2000-8000		30.0	+30.0	4.0	+40.0	2.0:1	2.0:1	+12.0	1200	BN333	SMA	—		
HIGH POWER	CON	ZHL-03-5WF	60-300		30.0	+36.0	4.0	+47.0	1.4:1	1.5:1	+24.0	2800	CP641	SMA	—
		ZHL-5W-1	5-500		40.0	+37.0	4.0	+49.0	2.0:1	2.5:1	+24.0	3300	DDD131	SMA	—
		ZHL-1-2W	5-500		29.0	+33.0	12.0	+44.0	2.0:1	2.0:1	+24.0	900	T35	BNC	SMA,N
		ZHL-900-10W	480-900		19.0	+38.0	10.0	+50.0	2.0:1	2.0:1	+24.0	5500	DDD131	SMA	—
		ZHL-1000-3W	500-1000		38.0	+35.0	9.0	+45.0	2.0:1	2.5:1	+24.0	2250	DDD131	SMA	—
VERY HIGH POWER	CON	LZY-1	20-512		39.0	+44.0	8.6	+54.0	2.0:1	9.0:1	+26.0	7300	BT412	SMA	—
		LZY-2	500-1000		40.0	+43.0	8.0	+54.0	2.0:1	3.5:1	+28.0	8000	BT451	SMA	—

<sup>[1]</sup> Minimum output power at 1 dB gain compression.

<sup>[2]</sup> VSWR for ZRL model is typical.

Using the Selection Guide:

Locate the Mini-Circuits' amplifier best suited for your particular application quickly with this convenient Selection Guide. Amplifiers are grouped into ten major categories and then listed in the sequence of frequency span. If your amplifier requirements are not met by the catalog models listed, we encourage you to contact our Application Engineering Department. You will find them courteous and eager to support your needs with their depth of knowledge coupled with our extensive database on engineering and catalog models.

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