

Lower Cost Amplifiers

These lower cost modules operate in frequencies from kHz to 1.0 Ghz. Some units require external capacitor values. Available in 4 Pin TO-8 (TZ), 4 Pin TO-12 (CZ), Flatpacks, Surface Mount Packages and Connectorized Housings.

Model	Frequency Range (MHz)		Gain (dB)		Noise Figure (dB)		Power Output @1dB Comp pt. (dBm)		IP3/IP2 Typ (dBm)	VSWR MAX In/Out	Power Typ (Vdc) (mA)	
	Typ	Min	Typ	Min	Typ	Max	Typ	Min			Typ	mA
	to 200 Mhz											
TZ9212	0.1	200	31.5	30.0	3.5	4.0	+ 7.0	+ 5.0	+17/33	2.0:1	+15	35
TZ9209	5	200	30.5	29.0	3.5	4.0	+ 7.0	+ 5.0	+18/28	2.0:1	+12	36
TZ9203	5	200	31.5	30.0	3.5	4.0	+ 7.5	+ 6.0	+19/35	2.0:1	+15	35
TZ9210	0.1	200	29.0	27.5	4.5	6.0	+ 7.0	+ 5.0	+19/33	2.0:1	+15	35
TZ9206	5	200	24.0	22.0	4.5	5.5	+ 7.5	+ 6.0	+18/34	2.0:1	+15	37
TZ9207	5	200	28.5	26.0	5.0	6.0	+ 8.0	+ 6.0	+20/33	2.0:1	+12	38
TZ9201	5	200	29.5	27.0	5.0	6.0	+ 8.0	+ 6.0	+19/34	2.0:1	+15	35
TZ9208	5	200	27.5	26.0	5.0	6.0	+15.5	+14.5	+28/44	2.0:1	+12	90
TZ9211	0.1	200	27.5	26.0	5.2	6.0	+16.0	+15.0	+28/40	2.0:1	+15	90
TZ9202	5	200	28.5	26.0	5.2	6.0	+16.5	+15.0	+28/44	2.0:1	+15	90
TZ9216	5	200	12.5	11.0	5.5	7.0	+15.5	+13.5	+30/41	2.0:1	+15	50
TZ9204	5	200	20.8	20.0	6.0	7.0	+ 6.5	+ 5.5	+18/35	2.0:1	+15	37
TZ9205	5	200	20.5	20.0	6.0	7.0	+14.5	+13.0	+28/44	2.0:1	+15	90
TZ9214	5	200	14.0	12.5	6.5	7.5	+21.0	+20.0	+34/44	2.0:1	+15	95
TZ9213	5	200	14.5	13.0	6.8	7.5	+22.0	+21.0	+34/44	2.0:1	+15	95
	to 400 Mhz											
TZ9400	5	400	14.0	13.0	3.5	4.5	- 4.0	- 8.0	+10/50	2.5:1	+15	8
TZ9416	5	400	28.0	27.0	4.0	5.5	- 3.4	- 6.0	+ 9/11	2.0:1	+15	20
TZ9411	5	400	15.0	14.0	4.5	6.0	+ 0.5	- 2.0	+13/15	2.0:1	+12	12
TZ9401	5	400	14.7	13.0	4.5	5.5	- 1.0	- 4.0	+11/13	2.2:1	+15	10
TZ9402	5	400	15.0	13.0	5.0	6.0	+ 8.5	+ 7.0	+21/27	2.0:1	+15	25
TZ9408	5	400	28.0	26.0	5.0	6.0	+10.5	+ 9.0	+22/34	2.0:1	+15	45
TZ9409	5	400	12.5	11.0	5.5	6.5	+14.5	+12.5	+26/38	2.0:1	+15	50
TZ9403	5	400	11.0	9.5	6.5	7.5	+17.0	+15.0	+30/38	2.0:1	+24	62
TZ9404	5	400	11.0	9.5	6.5	7.5	+17.0	+15.0	+30/38	2.0:1	+15	65
TZ9405	5	400	13.5	12.0	6.5	7.5	+20.0	+18.5	+35/42	2.0:1	+15	90
	to 200 Mhz											
CZ8201	5	200	32.0	30.0	3.2	4.0	+ 5.8	+ 3.0	+16/38	2.0:1	+15	30
CZ8206	5	200	32.0	30.0	3.5	4.0	+ 3.5	+ 1.0	+15/26	2.0:1	+12	30
CZ8251	5	200	26.5	24.0	4.0	4.5	+ 3.0	- 1.0	+14/27	2.0:1	+ 5	30
CZ8207	5	200	18.0	17.0	4.0	5.0	+ 4.0	+ 0.0	+15/17	2.0:1	+ 5	17
CZ8208	5	200	14.5	13.0	5.0	6.0	+12.5	+11.0	+26/34	2.0:1	+12	36
CZ8202	5	200	29.0	27.0	5.5	6.5	+11.5	+ 9.5	+23/34	2.0:1	+15	55
CZ8203	5	200	20.0	19.0	6.0	7.0	+ 9.5	+ 8.0	+21/39	2.0:1	+15	62
CZ8205	5	200	13.5	12.0	6.0	7.0	+21.0	+19.0	+25/30	2.5:1	+15	95
	to 250 Mhz											
CZ8451	5	250	17.0	15.5	2.2	3.0	+ 2.5	+ 0.0	+14/15	2.0:2	+ 5	12.5
CZ8453	5	250	21.0	19.5	3.0	3.2	+ 3.0	- 1.0	+15/14	2.3:1	+ 5	16
CZ8653	5	250	22.0	20.0	3.0	3.2	+ 5.0	+ 2.5	+15/17	2.0:1	+15	15
	to 400 Mhz											
CZ8400	5	400	15.5	14.0	3.2	4.0	- 1.5	- 4.0	+11/10	2.0:1	+15	10
CZ8460**	kHz	400	15.0	14.0	3.3	4.0	- 1.5	- 4.0	+11/10	2.0:1	+15	10
CZ8461**	kHz	400	15.0	13.5	4.5	5.5	- 1.5	- 4.0	+11/ 9	2.0:1	+15	10
CZ8401	5	400	15.0	13.5	4.5	5.5	- 1.5	- 4.0	+11/ 9	2.0:1	+15	10
CZ8402	5	400	15.0	13.5	4.7	5.8	+ 9.0	+ 7.0	+20/27	2.0:1	+15	25
CZ8462**	kHz	400	14.5	13.0	5.0	7.0	+ 8.5	+ 7.0	+20/27	2.2:1	+15	25
CZ8405	5	400	16.0	14.5	5.5	7.0	+20.5	+16.0	+32/35	2.0:1	+15	90
CZ8463**	kHz	400	10.5	9.0	6.5	7.5	+17.0	+15.0	+30/36	2.0:1	+24	65
CZ8464**	kHz	400	10.5	9.0	6.5	7.5	+17.0	+15.0	+30/39	2.0:1	+15	65
CZ8403	5	400	10.5	9.0	6.8	7.5	+17.0	+15.0	+30/36	2.0:1	+24	65
CZ8404	5	400	10.5	9.0	6.5	7.5	+17.0	+15.0	+30/39	2.0:1	+15	65
	to 500 Mhz											
CZ8553	5	500	19.5	18.0	3.5	4.5	+12.0	+ 9.0	+24/30	2.2:1	+15	33

** Requires 3 external capacitors.