

Full Performance Amplifiers - GaAs FET

Available in: 4-Pin TO-8 (TM); 4-Pin TO-8B (TR); 0.5" sq. Flatpack (FP); 0.450" sq. Surface Mount Package (TN); 0.375" sq. Surface Mount Package (PN); Connectorized Housing (BX). **Non-Hermetic reduced cost configurations available.**

Model	Frequency Range (MHz)		Gain (dB)		Noise Figure (dB)		Power Output @1dB Comp pt. Typ (dBm) Min		IP3/IP2 Typ (dBm)	VSWR MAX In/Out	Power Typ (Vdc) (mA)	
	Typ	Min	Typ	Min	Typ	Max	Typ	Min			Typ	Min
	to 2000 Mhz											
TR9765	1700	2000	23.0	20.0	2.0	3.0	+16.0	+14.5	+27/41	2.0:1	+15	80
TM9700	200	2000	12.0	10.5	2.2	4.0	+19.0	+18.0	+33/43	2.2:1	+ 6	65
TM9701	200	2000	12.0	11.0	3.0	4.0	+14.0	+13.0	+25/32	2.0:1	+ 5	48
TM9712	500	2000	11.0	9.0	3.0	4.0	+16.0	+14.0	+24/30	2.0:1	+15	46
TM9713	500	2000	11.0	8.5	4.5	6.0	+22.0	+18.0	+34/44	2.0:1	+15	120
TR9737	100	2000	9.5	8.0	4.5	6.5	+24.0	+22.0	+38/49	2.0:1	+15	140
TM9715	500	2000	11.0	10.0	4.5	6.0	+25.0	+24.0	+40/49	2.3:1	+12	180
TM9709	10	2000	10.5	8.5	4.5	6.0	+27.0	+26.0	+39/48	2.0:1	+15	180
TM9355	5	2000	10.0	8.5	5.0	6.5	+10.0	+ 9.0	+23/32	2.0:1	+ 5	26
TM9725	500	2000	11.0	10.0	6.5	8.0	+26.5	+25.0	+38/45	2.0:1	+15	190
TM9711	1000	2000	12.0	10.0	2.2	3.0	+16.0	+15.0	+29/35	2.0:1	+ 6	62
TM9710	1000	2000	12.8	11.0	3.4	4.0	+12.0	+10.5	+23/33	2.0:1	+15	26
TM9139	10	2000	8.0	6.0	8.0	9.5	+24.0	+22.0	+35/42	2.0:1	+15	90
	to 2300 Mhz											
TM9302	1700	2300	10.5	8.5	5.0	6.5	+15.0	+14.0	+23/40	2.0:1	+15	18
	to 2400 Mhz											
TM9730	1400	2400	12.0	10.0	4.0	5.5	+26.0	+25.0	+37/46	2.5:1	+15	150
	to 2500 Mhz											
TM9740	2000	2500	11.0	10.0	4.0	5.5	+21.5	+20.0	+39/51	1.75:1	+15	98

Lower Cost Amplifiers

These modules operate in frequencies of kHz to 1GHz depending on the external coupling capacitors used and are designed for application in 50 ohm systems. Three external capacitors and a decoupling impedance are required. The decoupling impedance must be large in comparison to 50 ohms to minimize gain reduction. External capacitors determine the low frequency response of the amplifier. These units can be cascaded in series of two or more units without oscillation problems. Available in 3 Pin TO-39 and Connectorized Housings.

Model	Frequency Range (MHz)		Gain (dB)		Noise Figure (dB)		Power Output @1dB Comp pt. Typ (dBm) Min		IP3/IP2 Typ (dBm)	VSWR Max In/Out	Power Typ (Vdc) (mA)	
	Typ	Min	Typ	Min	Typ	Max	Typ	Min			Typ	Min
	to 300 Mhz											
CZ8040*	kHz	300	19.0	18.0	3.8	4.5	+ 9.5	+6.0	+21/26	3.0:1	+ 3.5	25
	to 400 Mhz											
CZ8111*	kHz	400	15.8	14.0	3.0	4.0	- 0.2	- 2.0	+12/11	3.0:1	+ 2.0	10
CZ8110*	kHz	400	15.0	13.0	4.0	5.5	- 0.2	- 5.0	+10/ 8	2.5:1	+ 3.0	10
CZ8120*	kHz	400	15.0	13.0	5.0	6.5	+ 9.0	+ 7.0	+21/25	2.5:1	+ 5.0	25
CZ8130*	kHz	400	14.0	13.0	6.0	7.0	+18.0	+15.0	+30/40	3.0:1	+ 5.7	60
	to 600 Mhz											
CZ8210*	kHz	600	10.0	9.0	6.0	7.5	- 3.5	- 6.0	+ 7/10	2.5:1	+ 1.8	10
CZ8220*	kHz	600	10.0	9.0	6.0	7.5	+ 8.0	+ 6.0	+20/26	2.5:1	+ 3.2	25
CZ8230*	kHz	600	10.0	9.0	7.0	8.0	+16.0	+13.0	+25/32	3.0:1	+ 4.5	60
	to 1000 Mhz											
CZ8052*	5	1000	21.5	20.0	6.0	7.0	+ 8.0	+ 6.0	+20/39	2.0:1	+15.0	60
CZ8050*	5	1000	22.5	20.5	6.0	7.0	+10.0	+ 6.0	+23/36	2.0:1	+15.0	67
CZ8310*	kHz	1000	8.0	7.0	7.0	8.0	- 1.5	- 4.0	+ 7/ 8	3.5:1	+ 1.6	10
CZ8320*	kHz	1000	9.0	7.0	7.0	8.0	+ 8.0	+ 6.0	+20/27	2.5:1	+ 2.8	25
CZ8330*	kHz	1000	6.2	5.0	9.5	11.0	+14.0	+10.0	+25/31	3.0:1	+ 4.5	60

* Requires external blocking capacitors and decoupling impedance.