

MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
THE SOLUTION!

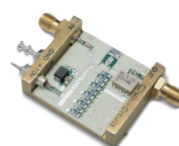


DC to 7 GHz

GVA+ Features

- Fixed 5V operation
- Up to 21 dBm output pwr.
- Choice of gain, from 10 dB to 24 dB typ. @ 100 MHz
- Transient and ESD protected
- Miniature SOT-89 package
- Ruggedized design
- Low thermal resistance

\$79.95
only ea. kit (4 models, 10 of each, 40 total)



Evaluation boards available, \$79.95
See individual model data sheets.

Kit K1-GVA+ Electrical specifications of each model

Model	Freq. GHz ▲ f _L -f _U	Gain, dB Typical								Max. Pwr.* (dBm)			Dynamic Range*		VSWR (:1) Typ.		Max. Rating ¹		DC ² Operating Power @ pin 3				Therm. Resist.	Evaluation Board		
										Output Input ¹ (1dB Comp.)																
		over frequency, GHz								Typ. Min			NF (dB) Typ. Typ.				I (mA)		P (mW)		Current (mA)		Device Volt. Typ. Min. Max.		θ _{jc} Typ. °C/W	
		0.1	1	2	3	4	6	7	Min@ 2GHz	Typ. Min	Typ.	Typ.	Typ.	In	Out	(mA)	(mW)	Typ.	Min.	Max.	Typ.	Min.	Max.			
GVA-81+	DC-7	10.5	10.5	10.0	9.3	8.7	8.1	7.6	9.0	19.7	17.5	20	7.4	36.6	1.3	1.4	160	1000	103	5.0	4.8	5.2	65	TB-410-81+		
GVA-82+	DC-7	15.3	14.9	13.8	12.5	11.7	10.6	9.9	12.4	20.6	18.0	20	6.6	36.0	1.3	1.7	160	840	106	5.0	4.8	5.2	68	TB-410-82+		
GVA-83+	DC-7	20.5	19.3	17.1	15.2	13.8	12.3	11.2	15.4	18.6	17.3	20	6.2	31.5	1.3	1.7	120	740	72	5.0	4.8	5.2	88	TB-410-83+		
GVA-84+	DC-6	24.1	21.7	18.4	16.0	14.6	12.5	-	17.4	20.6	19.6	13	5.5	36.6	1.3	2.6	160	1000	108	5.0	4.8	5.2	64	TB-410-84+		

Protected under U.S. Patent 6,943,629

▲ Low frequency cutoff determined by external coupling capacitors and RF choke (RFC). f_U is the upper frequency limit for each model.
* @ 2GHz

1. Permanent damage may occur if any of these limits are exceeded. These ratings are not intended for continuous normal operation.

2. Supply voltage must be connected to pin 3 directly through RF choke, GVA-83+ requires a 7.5 ohm bias resistor.

