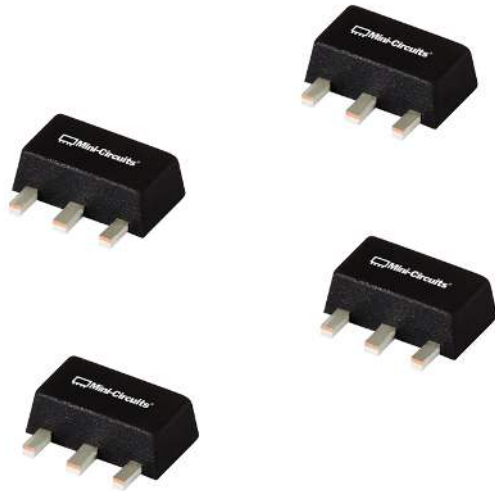




DESIGNER'S KIT K1-GVA+

# Monolithic Amplifiers

50Ω DC to 7 GHz



## FEATURES

- Fixed 5V operation
- Up to 21 dBm output power
- 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

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



Evaluation boards available.  
See individual model data sheets



## K1-GVA+ ELECTRICAL SPECIFICATIONS

(kit includes 4 models, 10 of each, 40 total)

Model	Freq. <sup>1</sup> (GHz)	Gain (dB) Typical								Maximum Power (dBm) @ 2 GHz			Dynamic Range @ 2 GHz		VSWR (:1) Typ.		Max. Rating <sup>2</sup>		DC <sup>3</sup> Operating Power @ pin 3				Therm. Resist. θ <sub>jc</sub> Typ. °C/W	Evaluation Board
		Over frequency, GHz								Output (1dB Compr.) Typ.	Input <sup>2</sup> Typ.	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	I (mA)	P (mW)	Current		Device Volt.				
		f <sub>c</sub>	f <sub>u</sub>	0.1	1	2	3	4	6									7	Min @ 2 GHz	Typ.	Min	Typ.		
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

1. Low frequency cutoff determined by external coupling capacitors and RF choke (RFC). f<sub>u</sub> is the upper frequency limit for each model.

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

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

