

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



RoHS compliant

DC to 8 GHz

Gali+, GVA+ Features

- Wideband, 50 Ω
- InGaP HBT microwave
- Up to 21.5 dBm output pwr.
- Noise figure from 2.7 dB
- Transient and ESD protected
- Miniature SOT-89 package
- Exposed metal bottom
- Excellent heat dissipation
- Low thermal resistance
- Fixed voltage operation, GVA $\overline{\text{84}}$

\$99.95
only *ea. kit (4 models, 10 of each, 40 total)*



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

Kit K3-Gali_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. θ _{jc} Typ. °C/W | Evaluation Board |
|--------------------------------|--|---------------------|------|------|------|------|------|-------------------|--------------------------|-------------------------|--------------|----------------|------|----------------|--------|--------------------------|--------------|---|------|-----|-----|---|------------------|
| | | over frequency, GHz | | | | | | Min@ | Output (1 dB Comp.) Typ. | Input ¹ Min. | NF (dB) Typ. | IP3 (dBm) Typ. | In | Out | I (mA) | P (mW) | Current (mA) | Device Volt. | | | | | |
| | | 0.1 | 1 | 2 | 3 | 4 | 6 | 2 GHz | | | | | | | | | Typ. | Min. | Max. | | | | |
| **GVA $\overline{\text{84}}$ + | DC-6 | 24.1 | 21.7 | 18.4 | 16.0 | 14.6 | 12.5 | 17.4 | 20.5 | 19.5 | 13 | 5.6 | 35.8 | 1.3 | 2.6 | 160 | 1000 | 108 | 5.0 | 4.8 | 5.2 | 64 | TB-410-84+ |
| Gali $\overline{\text{74}}$ + | DC-1 | 25.1 | 21.8 | 18.0 | 15.3 | 13.4 | - | 20.0 [†] | 18.3 | 18.0 | 10 | 2.7 | 38.0 | 1.2 | 1.6 | 130 | 700 | 80 | 4.8 | 4.3 | 5.3 | 120 | TB-409-74+ |
| Gali $\overline{\text{24}}$ + | DC-6 | 25.3 | 22.6 | 19.1 | 16.6 | 14.9 | 12.4 | 18.1 | 19.2 | 18.2 | 13 | 4.3 | 35.0 | 1.4 | 2.0 | 160 | 1000 | 80 | 5.8 | 5.4 | 6.2 | 64 | TB-409-24+ |
| Gali $\overline{\text{84}}$ + | DC-6 | 25.6 | 22.7 | 19.2 | 16.7 | 15.0 | 11.8 | 18.2 | 21.5 | 20.4 | 13 | 4.4 | 37.8 | 1.4 | 2.1 | 160 | 1000 | 100 | 5.8 | 5.4 | 6.2 | 64 | TB-409-84+ |

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

▲ Low frequency cutoff determined by external coupling capacitors. f_U is the upper frequency limit for each model.

* Models tested at 1 GHz, Gali $\overline{\text{74}}$ IP3 at 0.1 GHz.

** Operated with +5 V supply voltage.

† Min. at 1 GHz.

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 through a bias resistor in order to prevent damage, except GVA $\overline{\text{84}}$ +

Reliability predictions are applicable at specified current and normal operating conditions.

