

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



RoHS compliant

DC to 8 GHz

Gali+ Features

- Wideband, 50 Ω
- InGaP HBT microwave
- Up to 18.2 dBm output pwr.
- Usable to 10 GHz
- Transient and ESD protected
- Miniature SOT-89 package
- Exposed metal bottom
- Excellent heat dissipation
- Low thermal resistance



Kit K4-Gali+ Electrical specifications of each model (9 models, 10 of each, 90 total)

Evaluation boards available.
See individual model data sheets.

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	
		over frequency, GHz								Output (1dB Comp.) Typ.	Input ¹ Min.	NF (dB) Typ.	IP3 (dBm) Typ.	In		Out		I (mA)	P (mW)	Current (mA)	Device Volt.		θ_{jc} Typ. °C/W			
		0.1	1	2	3	4	6	8	Min@ 2 GHz					DC-3 GHz	3- f_U GHz	DC-3 GHz	3- f_U GHz				Typ.	Min.		Max.		
Gali-1+	DC-8	12.7	12.5	11.8	11.3	10.5	10.5	11.0	9	12.2	10.5	15	4.5	27	1.3	1.7	1.4	1.8	55	225	40	3.4	3.0	4.1	108	TB-409-1+
Gali-21+	DC-8	14.3	13.9	13.1	12.4	11.5	11.9	9.0	11.5	12.6	10.5	15	4.0	27	1.1	1.5	1.3	2.5	55	225	40	3.5	3.0	4.1	128	TB-409-21+
Gali-2+	DC-8	16.2	15.8	14.8	13.7	12.7	13.2	15.1	12	12.9	11.0	15	4.6	27	1.6	2.5	1.6	2.6	55	225	40	3.5	3.0	4.1	101	TB-409-2+
Gali-33+	DC-4	19.3	18.7	17.5	16.3	15.5	15.8	-	16	13.4	11.4	13	3.9	28	1.6	2.0	1.2	1.3	55	265	40	4.3	3.8	4.8	110	TB-409-33+
Gali-3+	DC-3	22.4	21.1	19.1	17.3	16.1	15.8	-	17.5	12.5	10.5	13	3.5	25	1.5	-	1.2	-	55	225	35	3.3	3.0	4.1	127	TB-409-3+
Gali-6+	DC-4	12.2	12.2	11.8	11.3	11.4	12.3	-	10	18.2	16.5	20	4.5	35.5	1.5	1.4	1.8	2.0	85	475	70	5.0	4.6	5.6	93	TB-409-6+
Gali-4+	DC-4	14.4	14.1	13.5	12.9	12.5	13.1	-	11	17.5	16.0	20	4.0	34	1.2	1.2	1.4	1.7	85	475	65	4.6	4.2	5.5	93	TB-409-4+
Gali-51+	DC-4	18.1	17.5	16.1	14.7	13.7	13.4	-	14	18.0	16.5	13	3.5	35	1.3	1.2	1.5	1.7	85	475	65	4.5	4.2	5.5	78	TB-409-51+
Gali-5+	DC-4	20.6	19.4	17.5	16.0	14.9	15.1	-	16	18.0	16.0	13	3.5	35	1.2	1.2	1.4	1.4	85	475	65	4.4	4.0	4.9	103	TB-409-5+

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 2 GHz except Gali-4+, 5+, 51+, 6+ 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. Reliability predictions are applicable at specified current and normal operating conditions.

