



Mini-Circuits

DESIGNER'S KIT K1-ERA+

Wideband Amplifiers

50Ω DC to 8 GHz



FEATURES

- Wideband, 50Ω
- Up to 13.0 dBm typ. output power
- Low thermal resistance
- Miniature microwave amplifier
- Plastic drop-in package
- Usable to 10 GHz
- Protected under US Patent 6,943,629

MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
THE SOLUTION



Evaluation boards available.
See individual model data sheets.



K1-ERA+ ELECTRICAL SPECIFICATIONS

(kit includes 3 models, 10 of each, 30 total)

Model	Freq. ¹ (GHz)	Gain (dB) Typical								Maximum Power (dBm) @ 2 GHz			Dynamic Range @ 2 GHz		VSWR (:1) Typ.				Absolute Max. Rating ²		DC ³ Operating Power @ pin 3				Therm. Resist.	Evaluation Board
		Over frequency, GHz								Output Input ¹ (1dB Compr.)		NF (dB) Typ.	IP3 (dBm) Typ.	In DC-3 GHz	In 3-f _u GHz	Out DC-3 GHz	Out 3-f _u GHz	I (mA)	P (mW)	Cur- rent (mA)	Device Volt.			θjc Typ. °C/W		
		f _c -f _u	0.1	1	2	3	4	6	8	Min @ 2 GHz	Typ.										Min	Min.	Max			
ERA-1+	DC-8	12.3	12.1	11.8	10.9	9.7	7.9	8.2	9	12.0	10.0	15	4.3	26	1.5	1.8	1.5	1.9	75	330	40	3.4	3.0	4.1	178	TB-431-1+
ERA-2+	DC-6	16.2	15.8	15.2	14.4	13.1	11.2	-	13	13.0	11.0	15	4.0	26	1.3	1.4	1.2	1.6	75	330	40	3.4	3.0	4.1	155	TB-431-2+
ERA-3+	DC-3	22.	21.0	18.7	16.8	-	-	-	16	12.5	9.0	13	3.5	25	1.5	-	1.4	-	75	330	35	3.2	3.0	4.1	154	TB-431-3+

1. Low frequency cutoff determined by external coupling capacitors. f_u 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 through a bias resistor in order to prevent damage. See "Biasing MMIC Amplifiers" at minicircuits.com/applications.shtml. Reliability predictions are applicable at specified current and normal operating conditions.

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