



DESIGNER'S KIT K2-ERA+

Wideband Amplifiers

Mini-Circuits

50Ω DC to 8 GHz



FEATURES

- Wideband, 50 Ω
- Up to 18.4 dBm typ. output power
- Low thermal resistance
- Miniature microwave amplifier
- Plastic drop-in package
- Low cost

MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
THE SOLUTION



Evaluation boards available.
See individual model data sheets.



K2-ERA+ ELECTRICAL SPECIFICATIONS

(kit includes 2 models, 10 of each, 20 total)

Model	Freq. ¹ (GHz)	Gain (dB) Typical						Maximum Power (dBm) @ 1 GHz			Dynamic Range @ 1 GHz		VSWR (:1) Typ.				Absolute Max. Rating ²		DC ³ Operating Power @ pin 3			Therm. Resist. θ _{jc} Typ. °C/W	Evaluation Board	
		Over frequency, GHz						Output (1dB Compr.)	Input ¹	NF (dB) Typ.	IP3 (dBm) Typ.	In DC-3	In 3-4	Out DC-3	Out 3-4	I (mA)	P (mW)	Current (mA)	Device Volt.					
		f _L -f _U	0.1	1	2	3	4	Min @ 2 GHz	Typ.	Min	Typ.	Typ.	Typ.	GHz	GHz	GHz	GHz			Typ.	Min.			Max
ERA-4+	DC-4	14.3	14.0	13.4	12.7	11.8	11	17.3	15.0	20.0	4.2	34.0	1.2	1.2	1.3	1.8	120	650	65	4.5	4.2	5.5	163	TB-431-4+
ERA-5+	DC-4	20.2	19.5	17.6	15.6	14.0	16	18.4	16.5	13.0	4.3	32.5	1.3	1.3	1.2	1.3	120	650	65	4.9	4.2	5.5	133	TB-431-5+

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

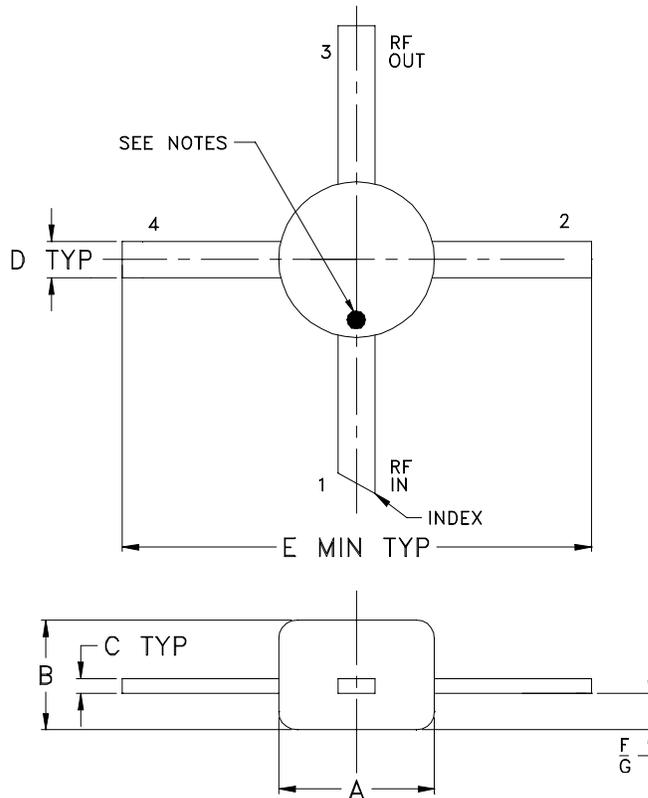
1. Low frequency cutoff determined by external coupling capacitors. f_U is the upper frequency limit for each model.

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.



Outline Dimensions



CASE#	A	B	C	D	E	F	G	WT.GRAMS
VV105	.085 (2.16)	.060 (1.52)	.008 (0.20)	.020 (0.51)	.250 (6.35)	.012 (0.30)	.025 (0.64)	.015

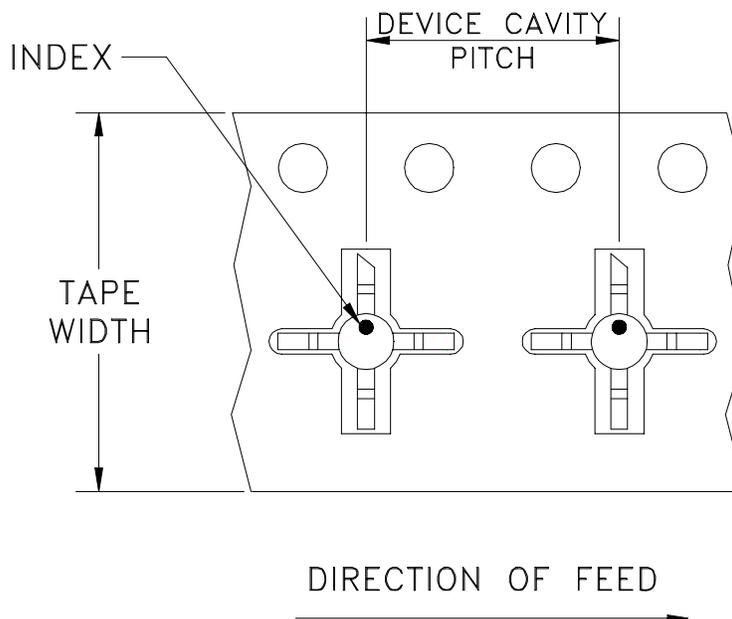
Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

1. Case material: Plastic.
2. Termination finish:
For RoHS Case Styles: Tin-Silver alloy plate over Nickel barrier.
For RoHS-5 Case Styles: Tin-Lead plate.
3. RF input termination (1) identified by one or both of the following at factory option:
 - (a) diagonally cut termination, which be 45° (ref) in either direction;
 - (b) orientation mark on the case. Model dash number is identified by color dot or alphanumeric code on case. See specification data sheet.
4. Special Tolerances: Termination width $\pm .005$ inch, termination thickness $\pm .003$ inch.

Tape & Reel Packaging TR-F4

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
12	8	7	Small quantity standards (see note)	20
				50
				100
				200
				500
		7	Standard	1000

Note: Please Consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: www.minicircuits.com/pages/pdfs/tape.pdf



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