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

RoHS COMPLIANT

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 Over frequency, GHz								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
										Output (1dB Compr.)		Input [1]			In DC-3	In 3-f_U	Out DC-3	Out 3-f_U			Cur-rent	Device Volt.				
	f_L-f_U	0.1	1	2	3	4	6	8	Min @ 2 GHz	Typ.	Min		NF (dB) Typ.	IP3 (dBm) Typ.	GHz	GHz	GHz	GHz	I (mA)	P (mW)	(mA)	Typ.	Min.	Max	øjc Typ. °C/W	
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+

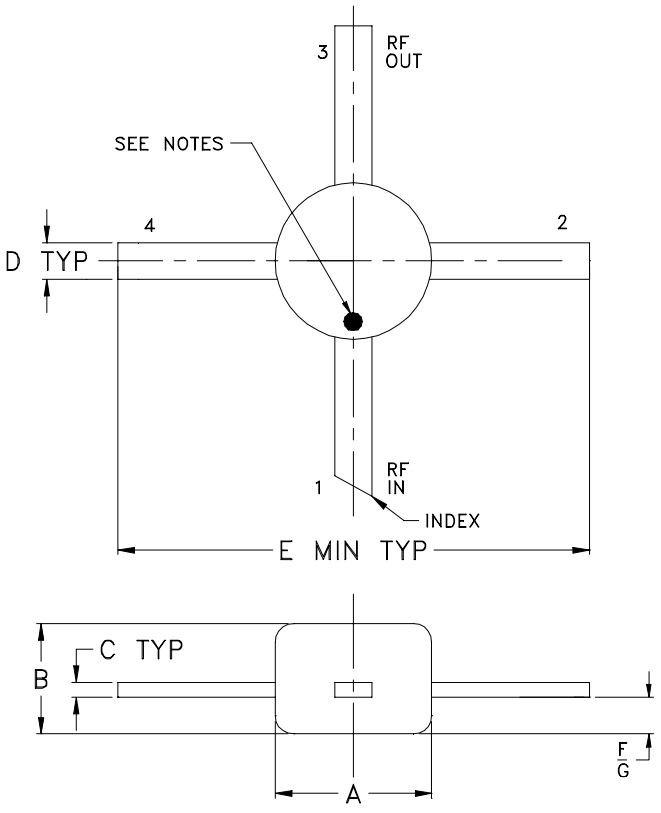
1. Low frequency cutoff determined by external coupling capacitors. f_U is the upper frequency limit for each model.
2. Permanent damage may occur if any of these limits are exceeded. These ratings are not intended for continuous normal operation.
3. Supply voltage must be connected to pin 3 through 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.

REV. B
ECO-009046
K1-ERA+
MCL NY
080221

Case Style V V

VV105

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. ± .03; 3 Pl. ± .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 ± .005 inch, termination thickness ± .003 inch.

Mini-Circuits®
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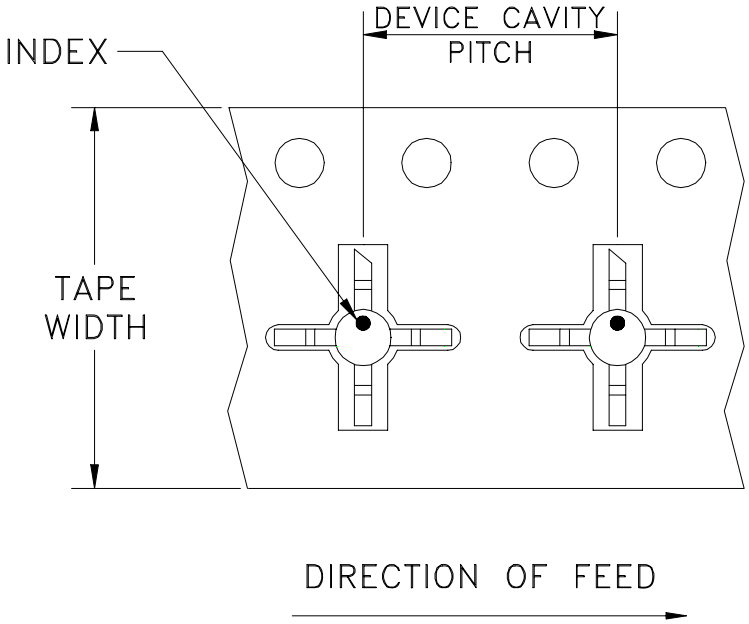
Mini-Circuits ISO 9001 & ISO 14001 Certified

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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