



COAXIAL

Medium Power Amplifier

ZKL-1R5+

Mini-Circuits

50Ω 10 to 1500 MHz SMA-Female

KEY FEATURES

- Wideband, 10 to 1500 MHz
- High IP3, +31 dBm typ.
- Low noise, 3 dB typ.
- High gain, 40 dB typ.
- Protected by US Patent, 6,943,629



Generic photo used for illustration purposes only

APPLICATIONS

- Communication systems
- Cellular
- Satellite distribution
- GSM/ISM

PRODUCT OVERVIEW

Mini-Circuits' MODEL-ZKL-1R5+ is a medium power, high gain amplifier that can be used for many different applications including cellular, communications, GSM/ISM, and GPS signal amplification

ELECTRICAL SPECIFICATIONS AT +25°, V_{CC} = +12 VDC

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		10		1500	MHz
Gain	10-1500	36	40		dB
Gain Flatness	10-1500	+15		±1.2	dB
Output Power at 1 dB Compression (P1dB)	10-1500				dBm
Input/ Output Return Loss	10-1500		15.5 / 12.7		dB
Output Third Order Intercept Point (OIP3)	10-1500		+31		dBm
Noise Figure	10-1500		3.0		dB
DC Supply Voltage (V _{CC})			+12		V
DC Current				115	mA

ABSOLUTE MAXIMUM RATINGS¹

Parameter	Ratings
Operating Temperature	-40° C to +75° C
Storage Temperature	-55° C to +100° C
RF Input Power ² (CW)	+13 dBm
DC Operating Voltage (V _{CC})	+13 VDC

1. Continuous operation is not recommended at these extremes. Permanent damage may occur if any of these limits are exceeded.

2. Specified under matched load to 50 ohms.

3. Open load is not recommended, potentially damage the unit

4. With no load derate maximum input power by 20dB

Mini-Circuits

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ECO-027862
ZKL-1R5+
MCL NY
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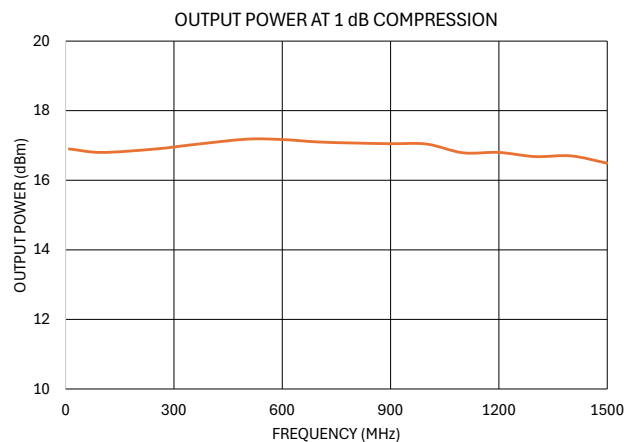
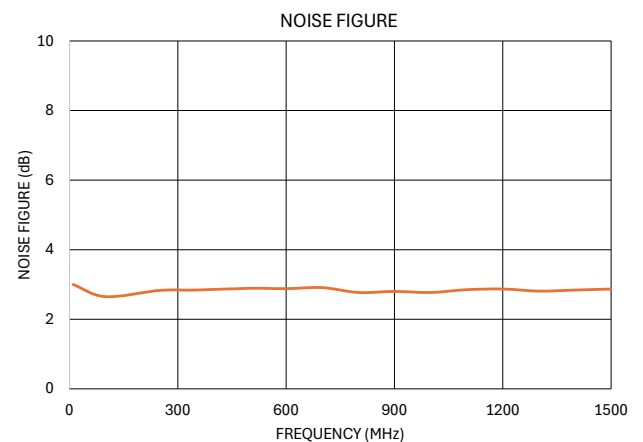
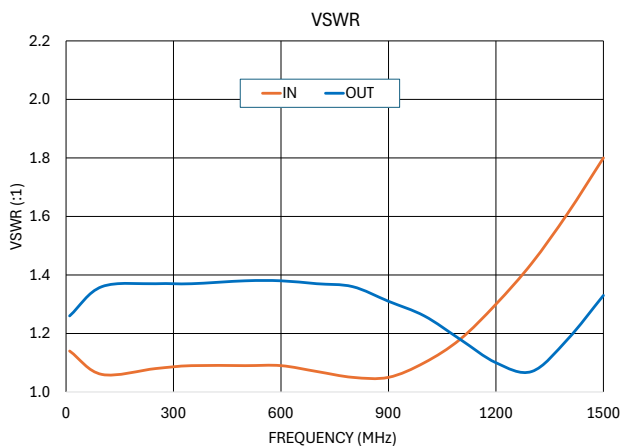
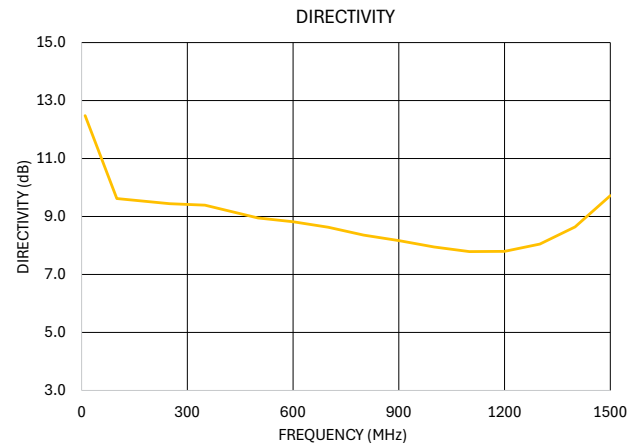
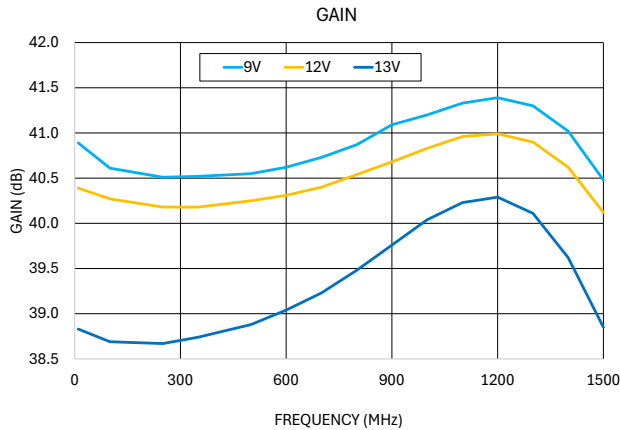
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TYPICAL PERFORMANCE GRAPHS





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Medium Power Amplifier

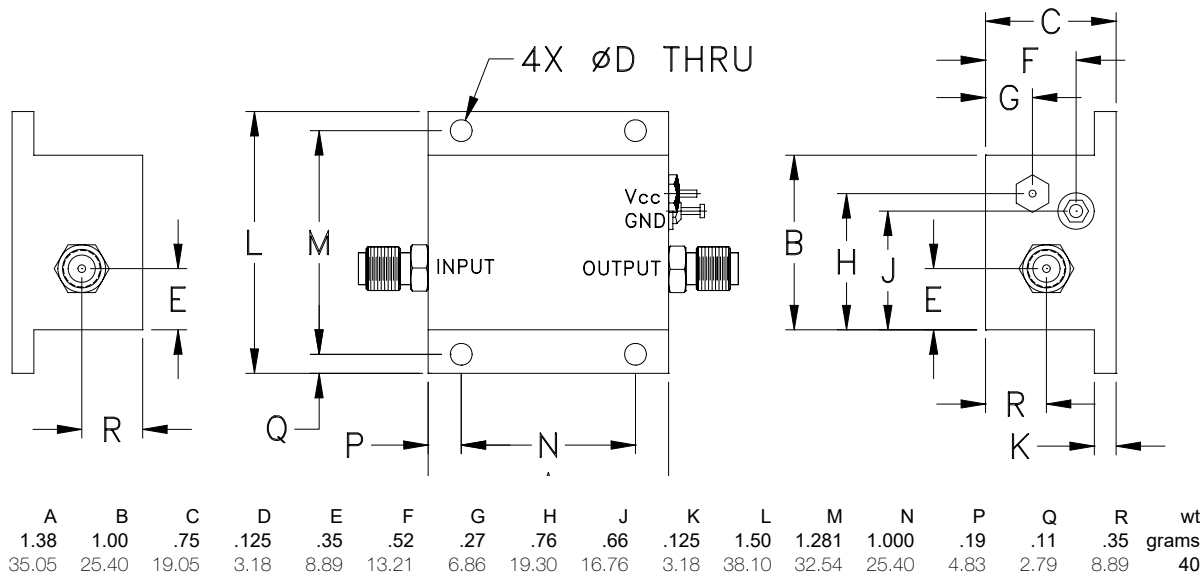
ZKL-1R5+

50Ω 10 to 1500 MHz SMA-Female

COAXIAL CONNECTIONS

Description	RF INPUT PORT	RF OUTPUT PORT
Connector Type	SMA-Female	SMA-Female

CASE STYLE DRAWING



PRODUCT MARKING*: ZKL-1R5+

*Marking may contain other features or characters for internal lot control.





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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD.

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
RoHS Status	Compliant
Environmental Ratings	ENV23T6

ORDERING INFORMATION

Model No. Links	ZKL-1R5+
Case Style	BY493
Connector	SMA-Female

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

