



High Performance Amplifier, 10 dB Gain 5 - 200 MHz

Features

- +49 dBm Typical Midband Third Order Intercept
- +29 dBm Typical Midband 1 dB Compression
- 4.5 dB Typical Midband Noise Figure

Description

M/A-COM's AM-132 is a coupler feedback amplifier with high intercept and compression points. The use of coupler feedback minimizes noise figure and current in a high intercept amplifier. This amplifier is packaged in a flatpack with flanges. Due to the metal flatpack the thermal rise minimized. The ground plane on the PC board should be configured to remove heat from under the package. AM-132 is ideally suited for use where a high intercept, high reliability amplifier is required.

Ordering Information

Part Number	Package
AM-132 PIN	Flatpack
AMC-132 SMA	Connectorized

Absolute Maximum Ratings ¹

Parameter	Absolute Maximum
Max. Input Power	+15 dBm
V _{bias}	+17.0 V
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +125°C

1. Operation of this device above any one of these parameters may cause permanent damage.

Pin Configuration

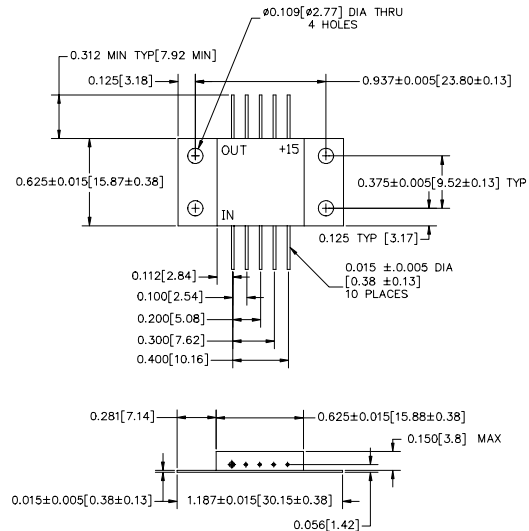
Pin #	Function	Pin #	Function
1	RF OUT	6	RF IN
2	GND 1	7	GND 2
3	GND	8	RF OUT
4	GND	9	GND
5	V _{bias}	10	GND

Specifications subject to change without notice.

- **North America:** Tel. (800) 366-2266, Fax (800) 618-8883
- **Asia/Pacific:** Tel.+81-44-844-8296, Fax +81-44-844-8298
- **Europe:** Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

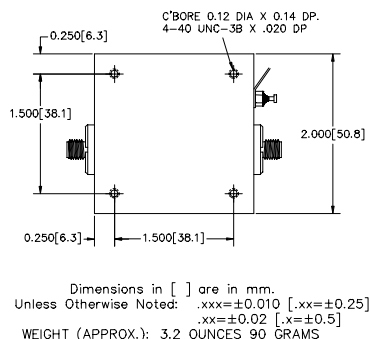
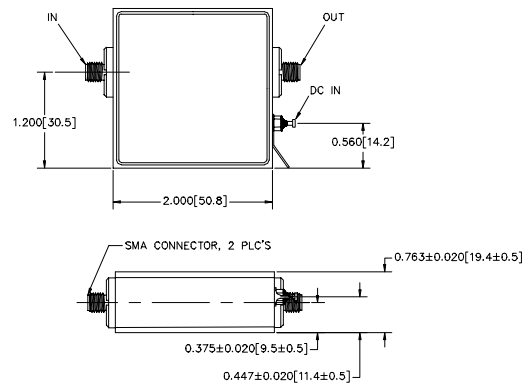
Visit www.macom.com for additional data sheets and product information.

FP-8



Dimensions in [] are in mm.
Unless Otherwise Noted: .xxx=±0.010 [.xx=±0.25]
.xx=±0.02 [.x=±0.5]
WEIGHT (APPROX.): 0.17 OUNCES 4.8 GRAMS

C-25



Dimensions in [] are in mm.
Unless Otherwise Noted: .xxx=±0.010 [.xx=±0.25]
.xx=±0.02 [.x=±0.5]
WEIGHT (APPROX.): 3.2 OUNCES 90 GRAMS

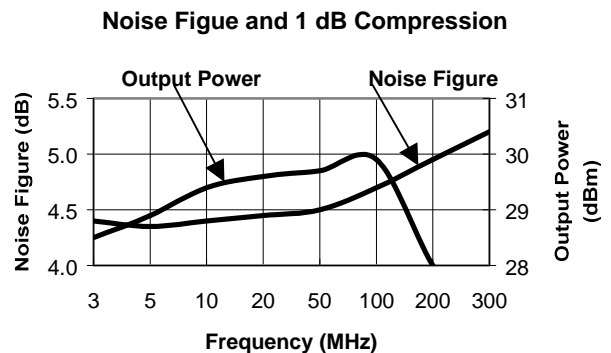
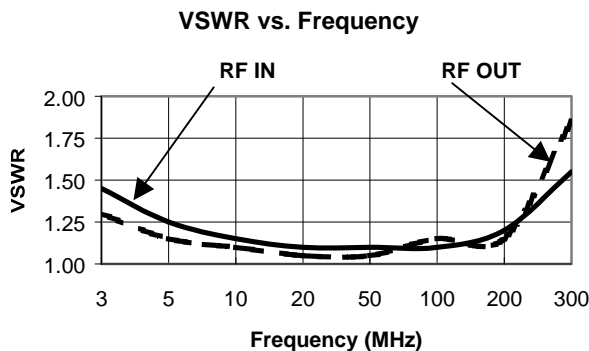
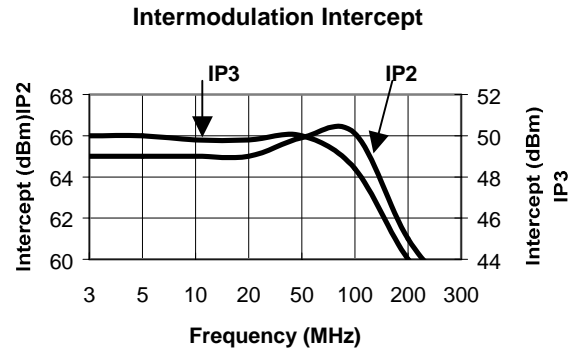
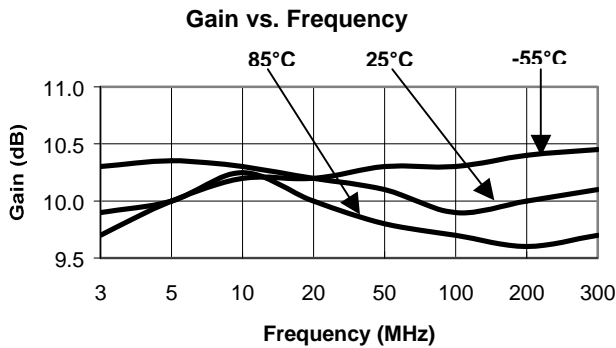


Electrical Specifications² T_A = -55°C to +85°C Case Temperature

Parameter	Test Conditions	Frequency	Units	Min	Typical	Max
Gain	50 MHz @ +25°C	50 MHz	dB	9.5	10.0	10.5
Frequency Response	—	5 - 200 MHz	dB	—	—	±0.5
Gain Variation with Temperature	—	5 - 200 MHz	dB	—	—	±0.6
1 dB Compression	Output Power	5 - 200 MHz	dBm	+25	—	—
Noise Figure	—	5 - 200 MHz	dB	—	—	6.0
Reverse Transmission	—	5 - 200 MHz	dB	—	-14	-13
VSWR	—	5 - 200 MHz	Ratio	—	—	1.5:1
Output IP ₂	Two-tone inputs up to +10 dBm	5 - 200 MHz	dBm	+54	—	—
Output IP ₃	Two-tone inputs up to +10 dBm	5 - 200 MHz 5 - 70 MHz	dBm dBm	+38 +45	— —	— —
Vbias	—	—	V	14.25	15	15.75
Ibias	1.35W Typical	—	mA	—	90	110

2. All specifications apply when operated at +15 VDC, with 50 ohms source and load impedance.
 3. Heat Sinking: Operation at case temperature above 95°C is not recommended. Heat sinking adequate to dissipate 1.35W must be provided in use.

Typical Performance



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V 3.0

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