

2 TO 4 GHz LOW-NOISE RECEIVER FRONT ENDS

MODELS: ARM0204LC2A, ARM0204LC2B AND ARM0204LC2C

FEATURES

- RF/LO coverage 2 to 4 GHz
- Conversion gain 30 dB typical
- Noise figure 1.8 dB maximum

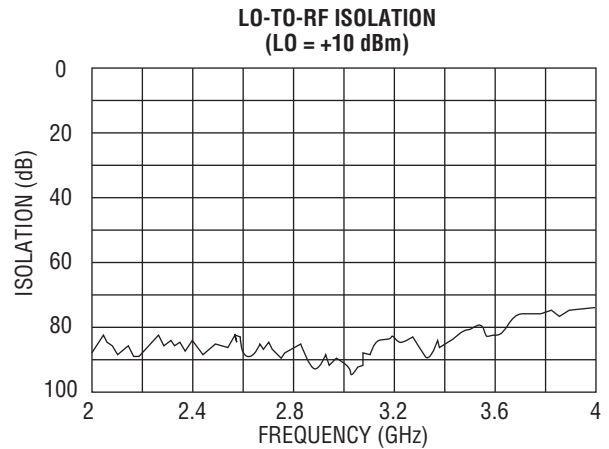
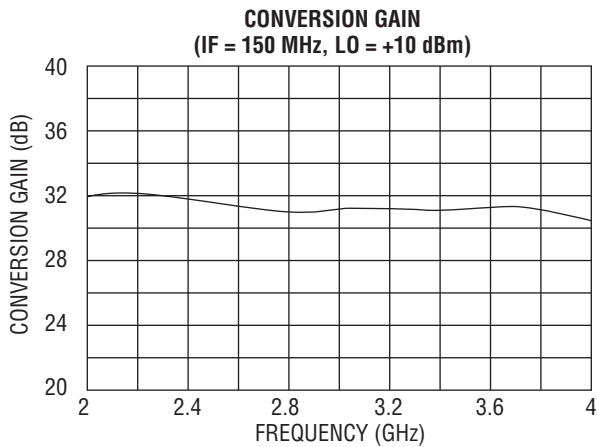
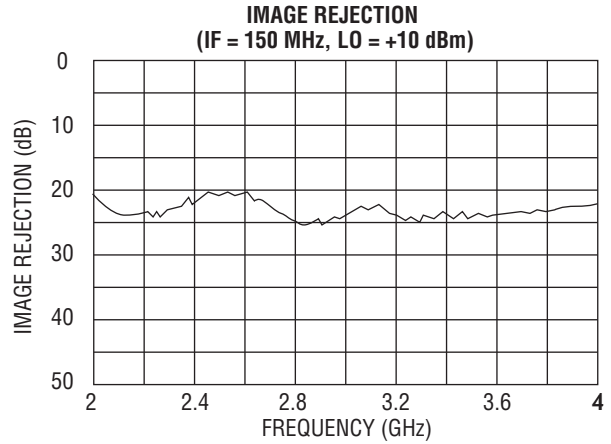
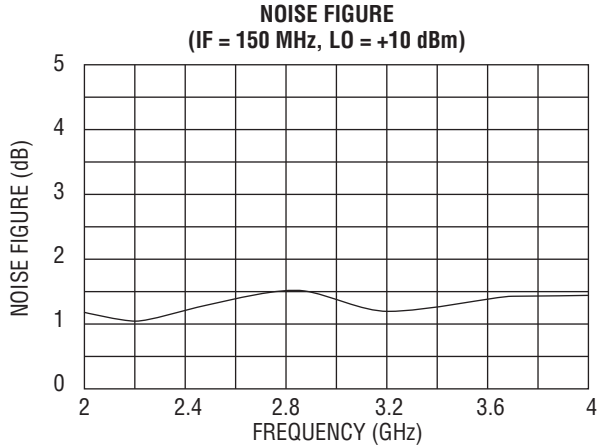


MITEQ's Model AR Series offers state-of-the-art low-noise amplifiers integrated with our ultra-small image rejection mixers to provide a complete receiver front-end assembly. This device comes in a nonhermetic housing, however a hermetically-sealed housing is available for extreme environmental conditions.

ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	2		4
RF VSWR (RF = -10 dBm, LO = +10 dBm)		Ratio		2.5:1	
LO frequency range		GHz	2		4
LO power range		dBm	+10		+13
LO VSWR (LO = +10 dBm)		Ratio		2.5:1	
DC power	+15 VDC	mA		150	
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion gain (Note 1)		dB	27	30	
Single-sideband noise figure at 25°C		dB		1	1.8
Image rejection (Note 1)		dB	18	20	
LO-to-RF isolation		dB	40		
LO-to-IF isolation		dB		25	
RF-to-IF isolation		dB		25	
Output power at 1 dB compression		dBm		6	
Output two-tone third-order intercept point		dBm		16	
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency range	ARM0204LC2A	MHz	20		40
	ARM0204LC2B	MHz	40		80
	ARM0204LC2C	MHz	100		200
IF VSWR (IF = -10 dBm, LO = +10 dBm)		Ratio		2:1	

ARM0204LC2C TYPICAL TEST DATA



MAXIMUM RATINGS

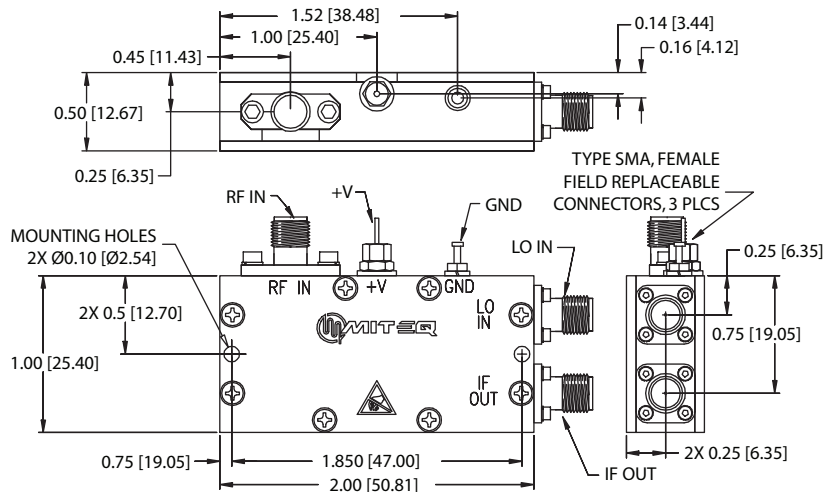
Specifications taken at +25°C
 Operating temperature -54 to +85°C
 Storage temperature -65 to +125°C

GENERAL NOTE

1. Unit aligned for RF > LO conversion.

NOTE: Test data supplied at 25°C. Conversion gain, LO-RF isolation, image rejection, noise figure.

OUTLINE DRAWING



NOTE: All dimensions shown in brackets [] are in millimeters.