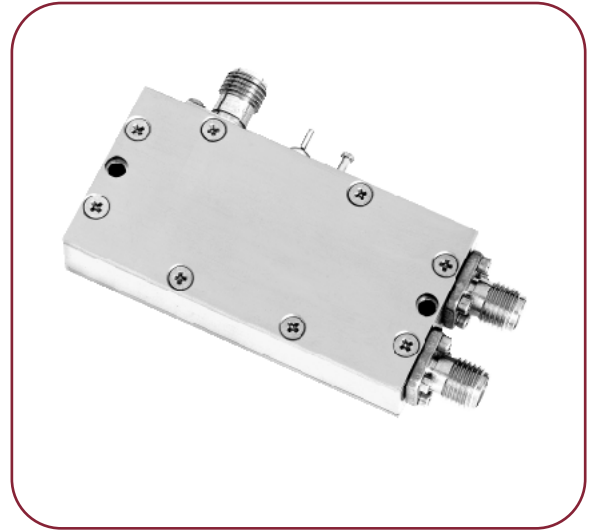


5.3 TO 5.9 GHz LOW-NOISE RECEIVER FRONT ENDS

MODELS: ARL5359LC2A, ARL5359LC2B AND ARL5359LC2C

FEATURES

- RF/LO frequency..... 5.3 to 5.9 GHz
- Conversion gain 32 dB typical
- Noise figure..... 3 dB typical
- Limiter protection 1 watt CW,
50 watts peak

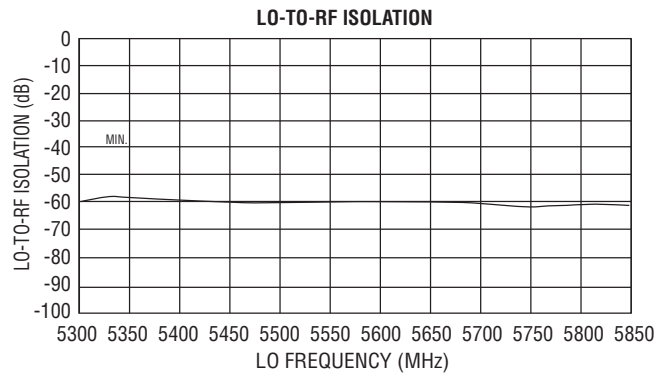
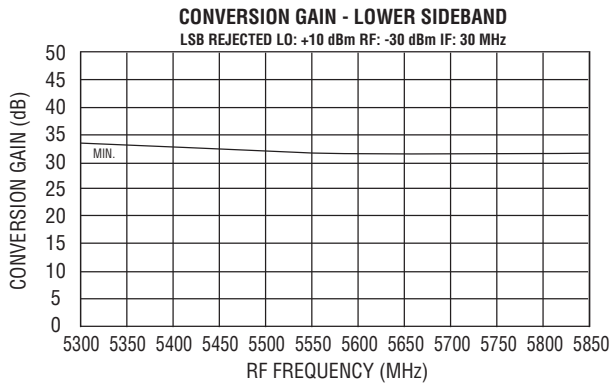
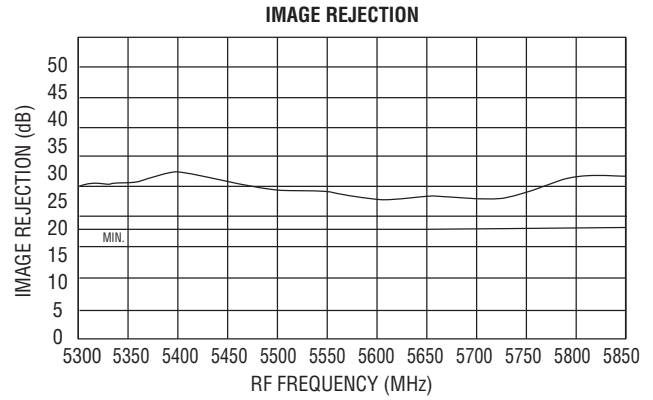
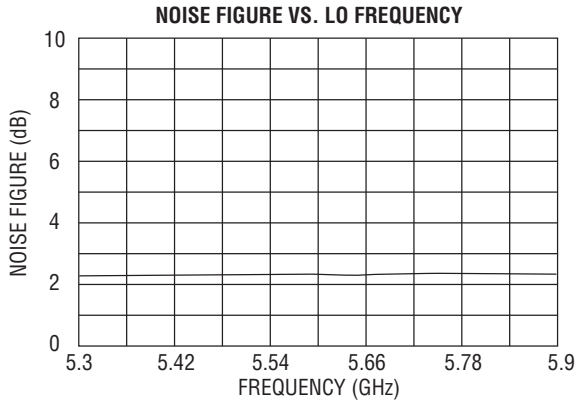


MITEQ's Model AR Series offers state-of-the-art low-noise amplifiers integrated with our ultra-small image rejection mixers to provide a complete receiver front-end assembly. This device comes in a nonhermetic housing, however a hermetically-sealed housing is available for extreme environmental conditions.

ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	5.3		5.9
RF VSWR (RF = -30 dBm)		Ratio		2.5:1	
Maximum input power	CW Peak	Watts Watts			1 50
LO frequency range		GHz	5.3		5.9
LO power range		dBm	+10		+13
LO VSWR		Ratio		2.5:1	
Bias	+15 volts	mA			150
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion gain (Note 1)		dBm dB	30	33	
Single-sideband noise figure at 25°C		dB		3	3.5
Image rejection (Note 1)		dB	18		
LO-to-RF isolation		dB	40		
LO-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		MHz MHz MHz	20 40 100		40 80 200
IF VSWR (IF = -10 dBm)		Ratio		2:1	

ARL5359LC2A TYPICAL TEST DATA



MAXIMUM RATINGS

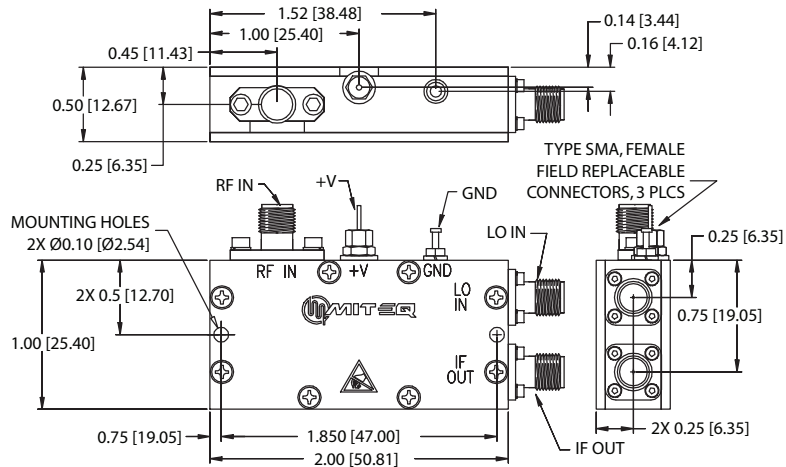
Specifications taken at +25°C
 Operating temperature -54 to +85°C
 Storage temperature -65 to +125°C

GENERAL NOTE

1. Unit aligned for RF > LO conversion.

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

OUTLINE DRAWING



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