

12 TO 18 GHz MIXER/IF AMPLIFIER

MODEL: DA1218LR5

FEATURES

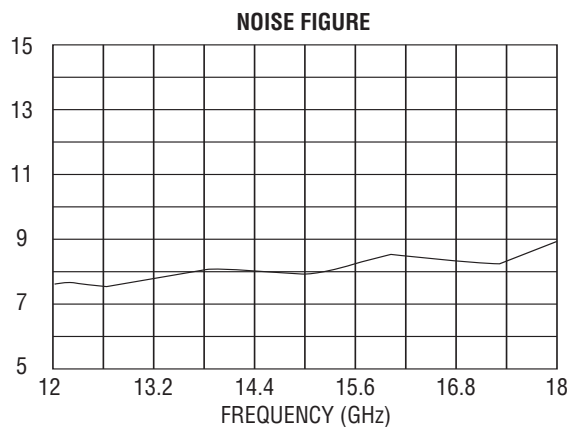
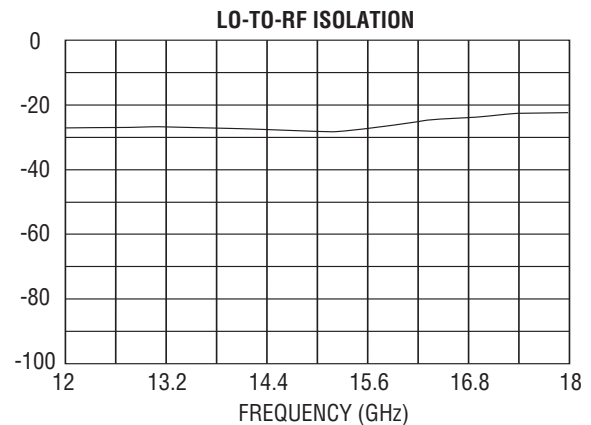
- Double-balanced mixer with integrated IF amplifier
- RF/LO coverage 12 to 18 GHz
- IF operation 10 to 250 MHz
- LO power range +10 to +13 dBm
- Packaging Hermetically sealed



MITEQ's DA Series combines our double-balanced mixer with a low noise IF amplifier to provide an integrated converter module. This design is particularly well suited to broadband downconverter receiver applications such as ESM and ELINT systems or test equipment applications requiring flat RF to IF amplitude and phase characteristics (e.g., FMCW or narrow pulse systems).

ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	12		18
RF VSWR	50 ohm reference	Ratio		2.5:1	
LO frequency range		GHz	12		18
LO power range		dBm	+10		+13
LO VSWR	50 ohm reference	Ratio		2.5:1	
DC bias	+12 volts	mA		50	
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
Conversion gain		dB	20	23	
Single-sideband noise figure		dB		9.5	
LO-to-RF isolation		dB	20		
LO-to-IF isolation		dB		20	
RF-to-IF isolation		dB		25	
Output power at 1 dB compression		dBm	+5		
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency range		MHz	10		250
IF VSWR	50 ohm reference	Ratio		2:1	

MIXER PRODUCTS

Specification temperature +25°C
Operating temperature -54 to +85°C
Storage temperature -65 to +125°C

OUTLINE DRAWING

