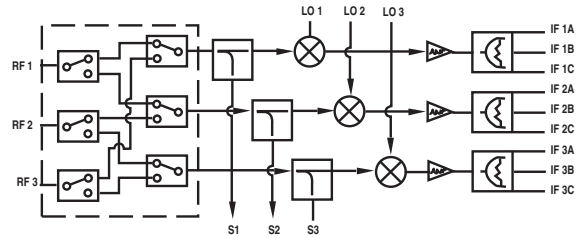


## 2 TO 4 GHz LOW-NOISE MIXER PREAMPLIFIER WITH SELECTABLE INPUTS

### MODEL: SYS0204N01R

#### FEATURES

- Low system noise figure ..... 11 dB typical
- Fast switching ..... 50 nsec typical
- Image rejection ..... 20 dB typical
- Cross path isolation ..... 60 dB typical
- Fast blanking function ..... 10 nsec typical



The SYS0204N01R is an integrated low-noise converter with internal image filtering and a 3P2T RF input selection switch. All three RF inputs and IF outputs are simultaneously active and feature 60 dB of isolation between the paths. The switch activates within 50 microseconds and also features the ability to perform a blanking function at speeds as fast as 10 nanoseconds. RF signal test ports are provided for sampling the input signal to each mixer. Hermetic sealing is available for high reliability applications. Please contact MITEQ for more information.

#### ELECTRICAL SPECIFICATIONS

INPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF frequency range		GHz	2		4
RF VSWR	50 ohm reference	Ratio		1.8:1	
V+ bias current	@ +15 V	mA			450
LO frequency range		GHz	2.065		4.110
LO power range		dBm	+8		+11
LO VSWR				1.8:1	
Switch control	-5 VDC	mA			0.01
	+0.9 VDC	mA			60
TRANSFER CHARACTERISTICS	CONDITION	UNITS	MIN.	TYP.	MAX.
RF/IF path gain		dB	5.25		6.75
Image rejection		dB		20	
Single sideband noise figure		dB		11	
RF coupled test port gain		dB		-12	
Cross path isolation		dB		60	
Path switching time		nsec		50	
OUTPUT PARAMETERS	CONDITION	UNITS	MIN.	TYP.	MAX.
IF frequency range		MHz	55		110
IF VSWR		Ratio		1.25:1	

#### MAXIMUM RATINGS

Specification temperature ..... +25°C  
 Operating temperature ..... 0 to 50°C  
 Storage temperature ..... -40 to +71°C

NOTE: Test data supplied at 25°C;  
 RF/IF path gain, image rejection and  
 noise figure.