DOUBLE BALANCE MIXER

0.01 to 1.5 GHz

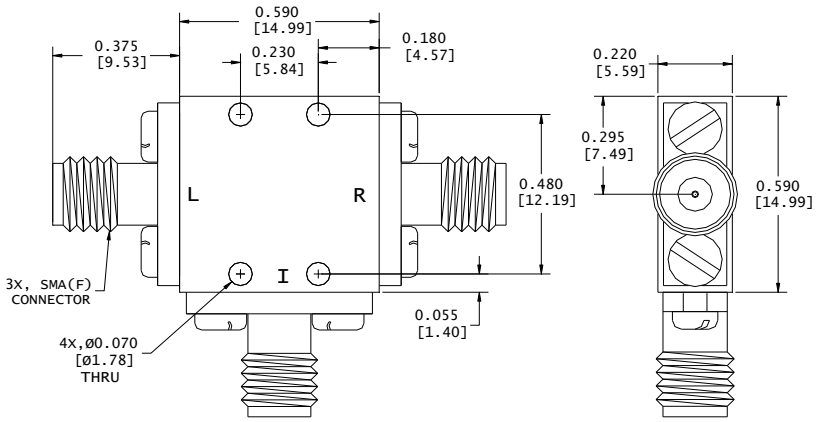
J0020LZ

PRODUCT FEATURE

- †Broadband Frequency Application
- †Excellent Conversion Loss
- †High Isolation
- †Frequency Converter Application

ABSOLUTE MAXIMUM RATING:

Operating Temperature:	-54ºC to +100ºC
Storage Temperature:	-65ºC to +100ºC
Peak Input Power for any Single Port:	+23 dBm Peak
Max RF Input Power:	200mWCW@+25ºC
Peak Input Current @ 25ºC:	100 mA



Parameters	SPECIFICATION				
	FREQ. (GHz)	MIN (dB)	TYPICAL (dB)	MAX (dB)	CONDITONS
CONVERSION LOSS					
RF INPUT	0.01 to1.5		7.0	8.5	IF=100MHz
LO INPUT	0.01 to1.5		8.0	9.0	IF=600MHz
IF OUTPUT	DC to 0.6				
VSWR	0.01 to1.5		2.5:1		
ISOLATION					
LO-RF	0.01 to1.5	30	40		
LO-IF	0.01 to1.5	26	35		
RF-IF	DC to 0.6	12	20		
1 dB Compression Point		0dBm	1dBm		
LO Drive		+7dBm	+8dBm		
Third-Order Input Intercept Point			+11 dBm		

NOTES:

1. Measured in a 50-ohm system with nominal LO drive and downconverter application only, unless otherwise specified. The I-Port frequency range extends to DC for phase detection, pulse modulation, or attenuator applications. I-Port VSWR degrades from a 50-ohm system at lo IF frequencies.
2. Typical values are measured at +25ºC and are not guaranteed

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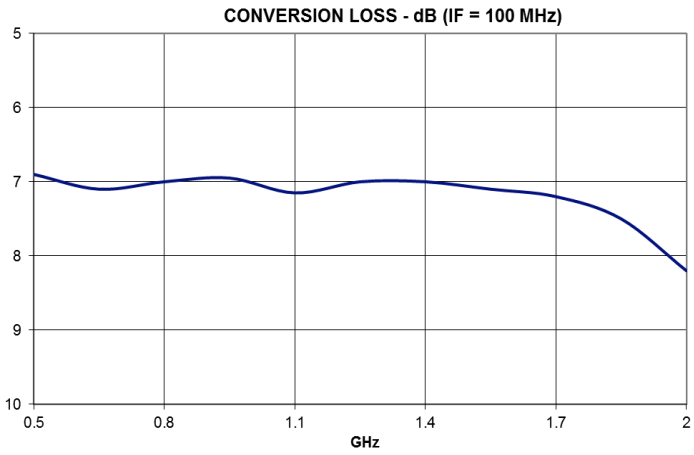
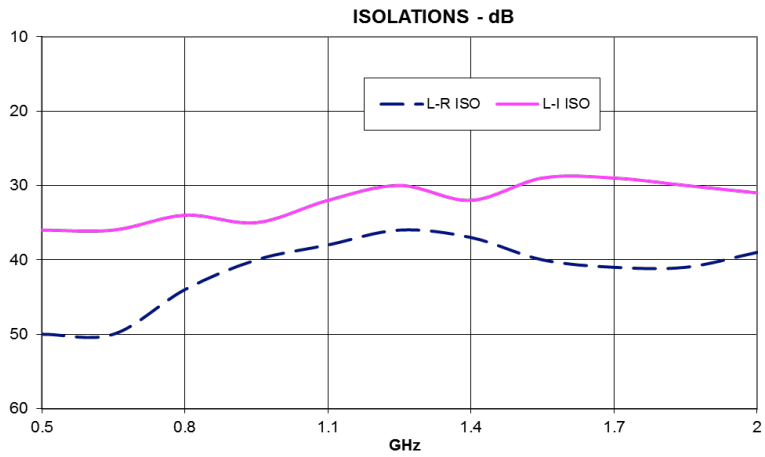
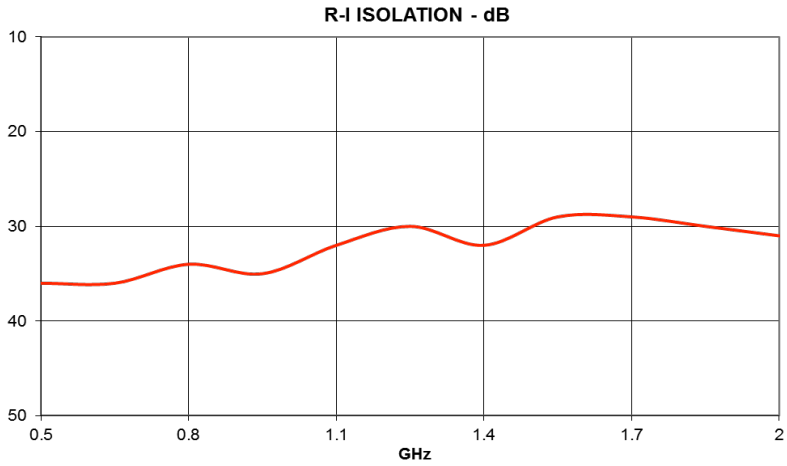
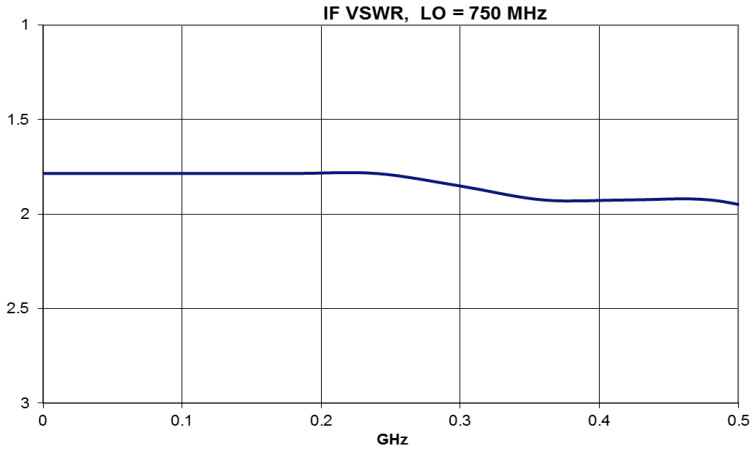
Typical Performance @ 25°c , LO Drive = +7 dBm









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Typical Performance of Harmonic Intermodulation Products

5	>65	>65	>65	>65	>65	>65
4	>65	>65	>65	>65	>65	>65
3	53	54	52	58	60	55
2	58	47	62	50	>65	38
1	18	0	30	19	41	26
0		17	35	20	40	29
mRF^2 / nLO^2	0	1	2	3	4	5

1 "x"on part number denotes LO drive level: L (+7 dBm), M (+10 dBm), N (+13 dBm) and H (+16 dBm). J0020 is only available in package style "Z".

2 Test Condition: F_{RF} = 500 MHz, F_{LO} = 520 MHz

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