

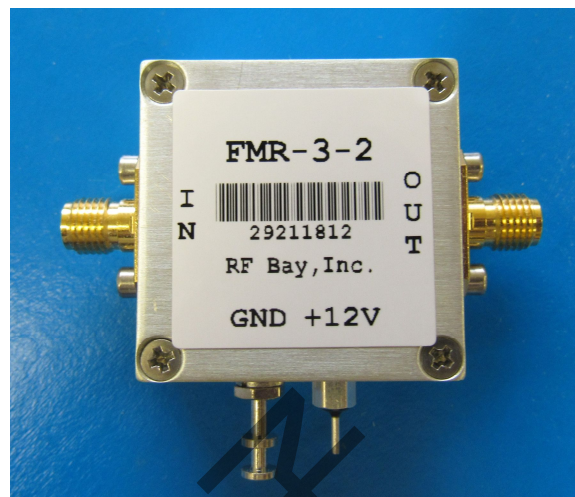
## FMR Series

## 320-450MHz Input Frequency Tripler

### Features

- Input Frequency: 320 – 450MHz
- Output Frequency: 960 – 1350MHz
- Conversion Gain: 6dB
- F0 Isolation: 30dB
- Input Drive Level: -3dBm
- DC Power: +12V
- SMA Connector

### Picture



Performance@390MHz, Pin= -3dBm

### Description

FMR-3-2 is an active frequency tripler operates with input frequency range from 320 to 450MHz and output frequency range from 960 to 1350MHz.

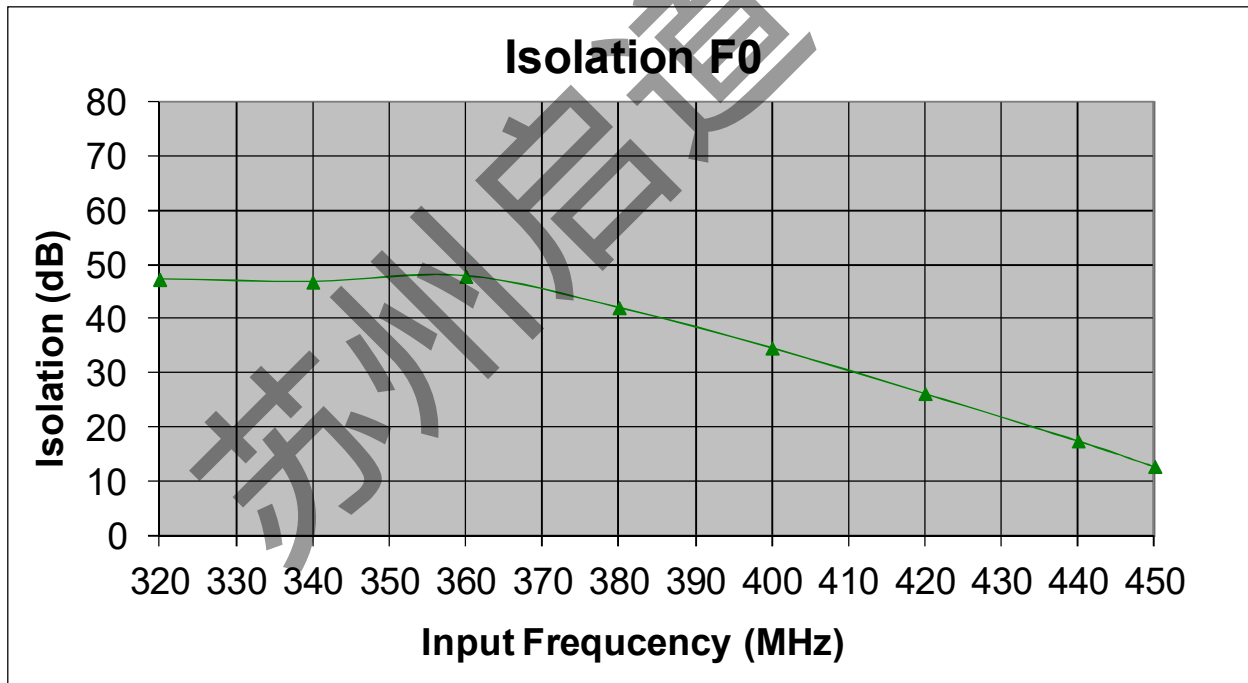
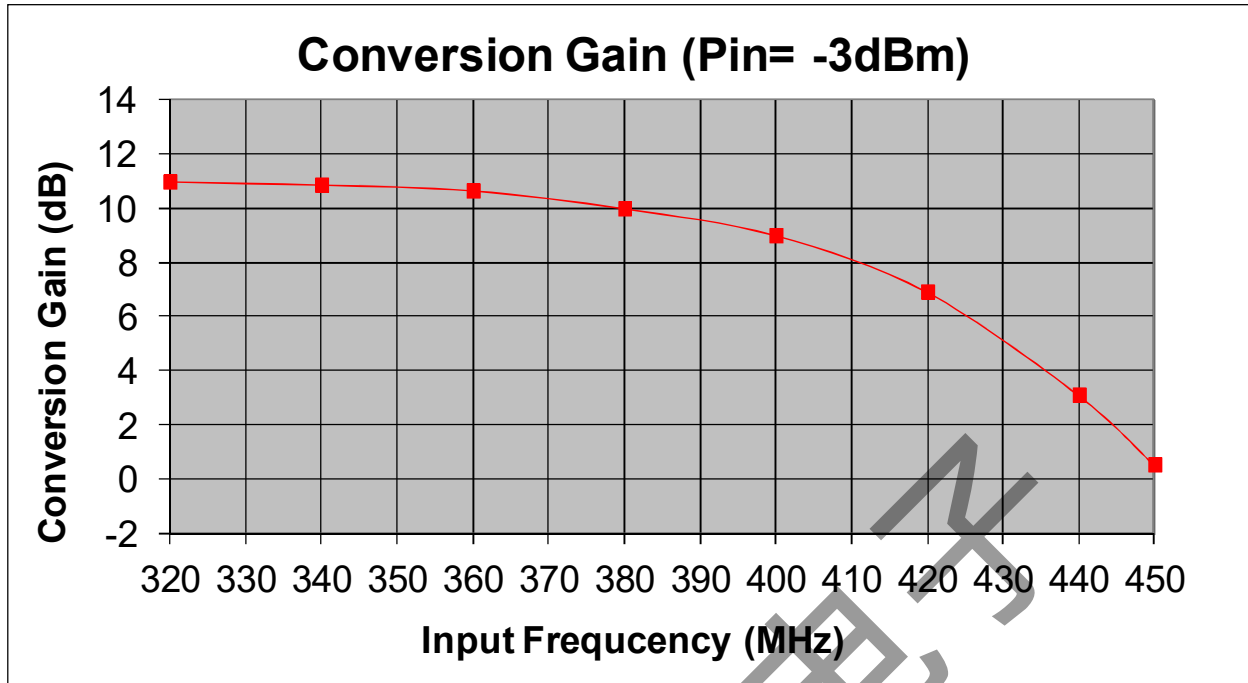
### Electrical Specifications @ +25 °C, $Z_{IN} = Z_{OUT} = 50\Omega$ , $P_{IN} = -3dBm$ , +12V

Parameter	Unit	Min.	Typ.	Max.
Input Frequency Range	MHz	320		450
Output Frequency Range	MHz	960		1350
Conversion Gain	dB	0	6	
F0 Isolation *	dB	10	30	
2F0 Isolation *	dB	20	30	
4F0 Isolation *	dB	30	40	
VSWR Input @ 390MHz			1.4:1	1.8:1
Output @ 1170MHz			1.7:1	2.2:1
DC Supply Voltage	V	10	12	15
Operating Current	mA		105	125

\* Isolation with respect to output power level

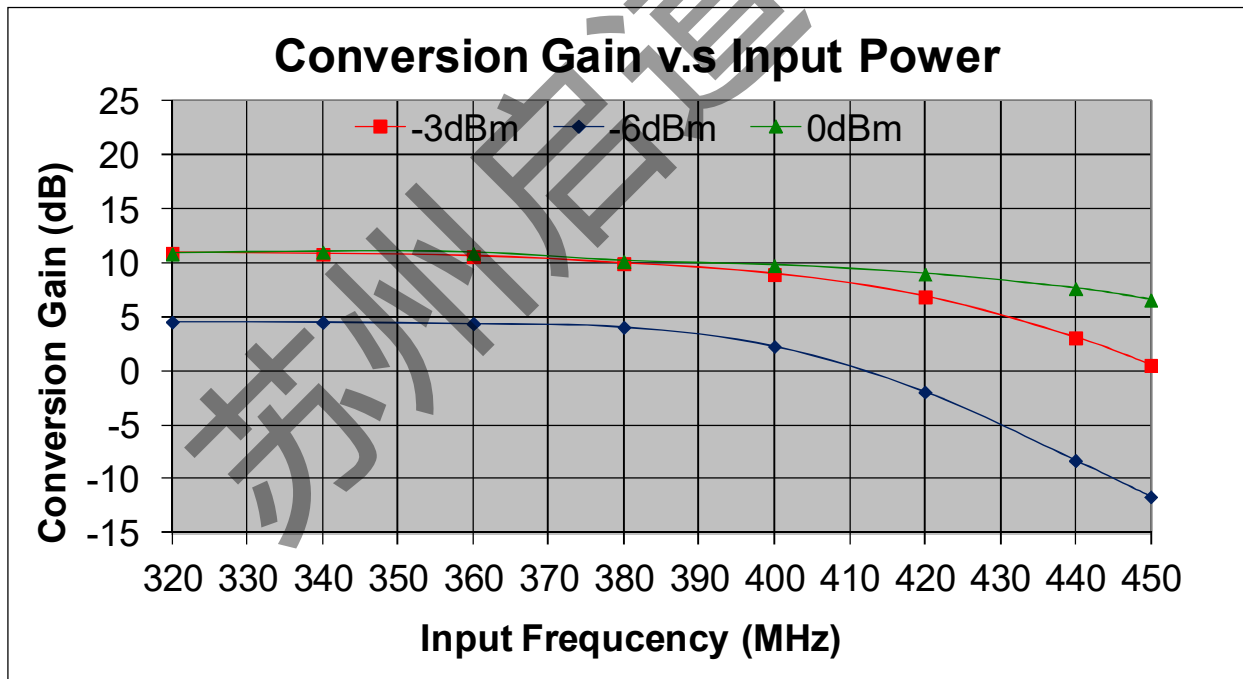
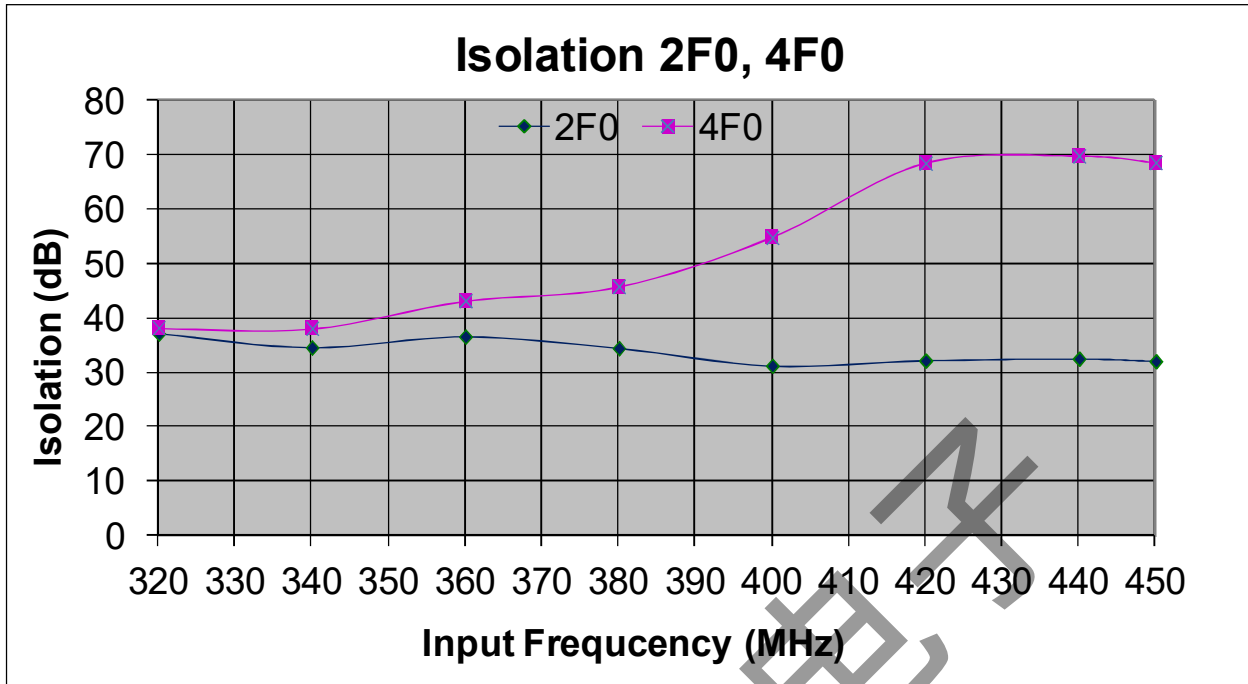
FMR Series

320-450MHz Input Frequency Tripler



**FMR Series**

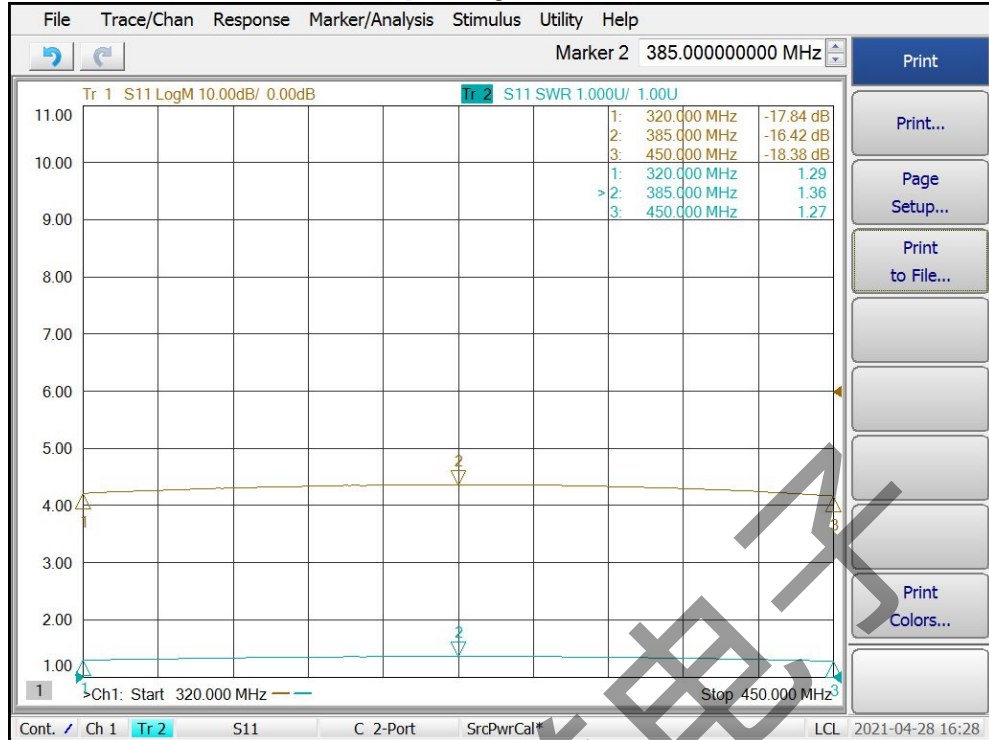
**320-450MHz Input Frequency Tripler**



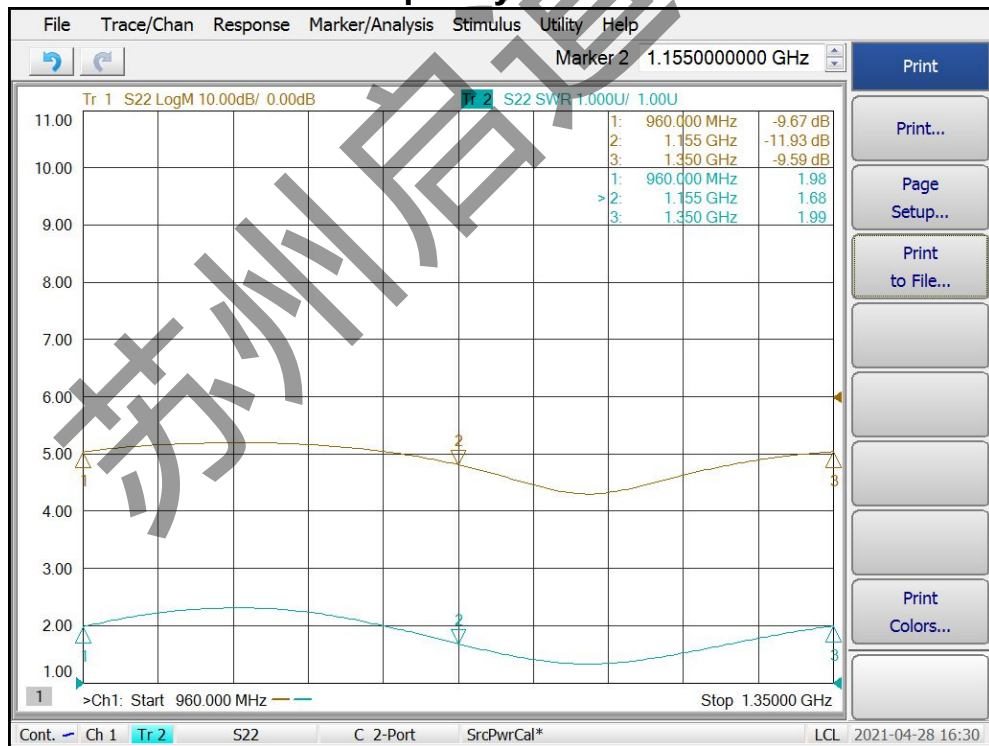
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**Return Loss S11 vs Frequency**



**Return Loss S22 vs Frequency**



## FMR Series

## 320-450MHz Input Frequency Tripler

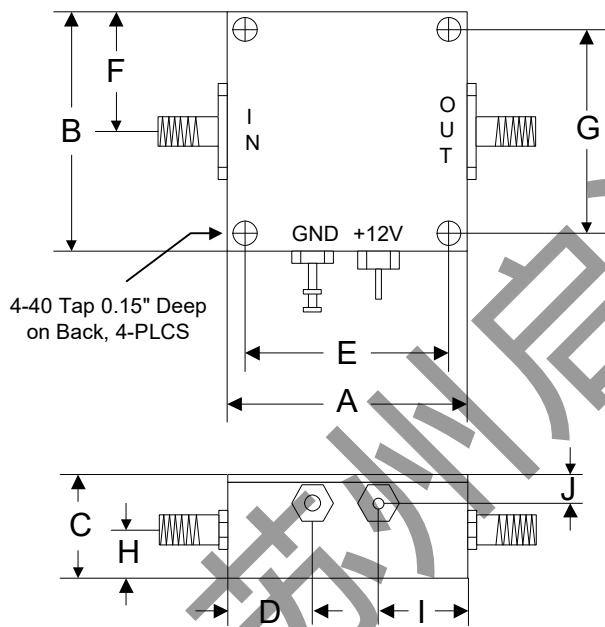
### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+23dBm
Supply DC Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +105 °C

### ESD Sensitive Material



### Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76