

# J4018 Double Balanced Mixer

4.0 to 18.0 GHz

## Technical Characteristics



Product Features
Multi-octave bandwidth
Broad frequency - input and output
Wide DC to IF frequency response
Low conversion loss
High port-to-port isolation

Maximum Ratings	
Storage Temperature	-65 to +150°C
Operating Temperature Peak	-54 to +125°C
Peak Input Power For Any Single Port	+23dBm Peak
Peak Input Power For Any Port	+26dBm peak
Peak Input Current @ +25° C	100mA

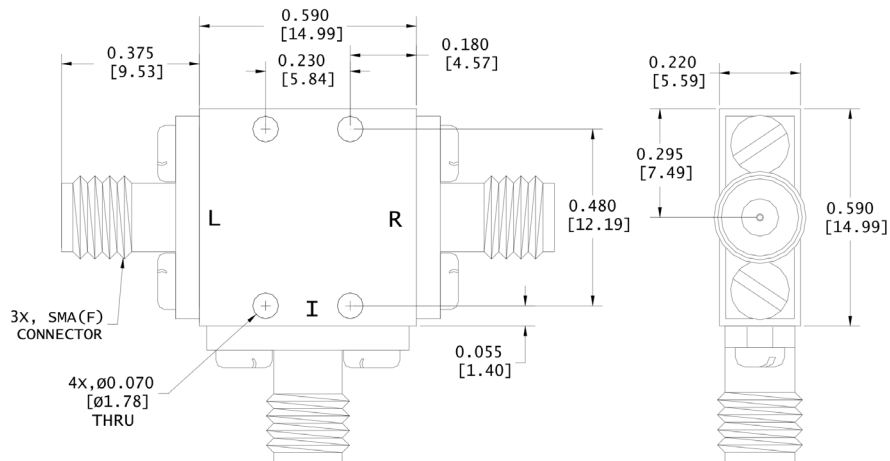
Parameters	Freq. (GHz)	Minimum	Typical	Maximum	Units	Conditions
<b>Conversion Loss</b>						
RF Input	4.0 to 18.0		5.5	7.5	dB	IF = 500 MHz
LO Input	4.0 to 18.0		6.0	8.0	dB	IF = 2000 MHz
IF Output	DC to 4.0		6.5	8.5	dB	IF = 4000 MHz
Conversion Flatness						
<b>Isolation</b>						
LO-RF	4 to 18.0	23.0	35.0		dB	
LO-IF	4 to 18.0	18.0	22.0		dB	LO = 4.0 to 6.0 GHz
RF-IF		23.0	35.0		dB	
VSWR						
1dB Comp.Point						
J4018L			1.0		dBm	
J4018M			1.0		dBm	
J4018H			10.0		dBm	
LO Drive						
J4018L			7.0	10.0	dBm	
J4018M			10.0		dBm	
J4018H			16.0		dBm	
Input TOIP						
J4018L			11.0		dBm	RF: 9.0 GHz @-6 dBm
J4018M			14.0		dBm	
J4018H			19.0		dBm	RF: 9.01 GHz @-6 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 Ω system at LO-IF frequencies.

2. Typical values are measured at +25°C and are not guaranteed.

**Package outline Z**



1

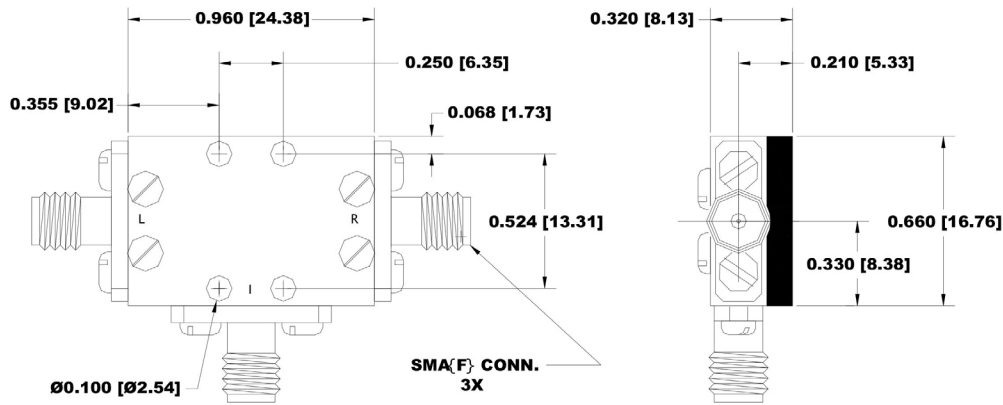
DISCLAIMER: Subject to change without notice.

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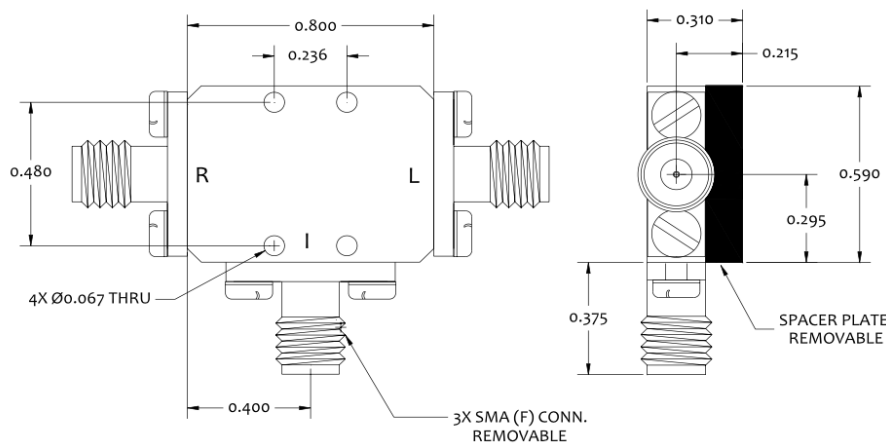
4.0 to 18.0

## Outline Drawings 1 of 2

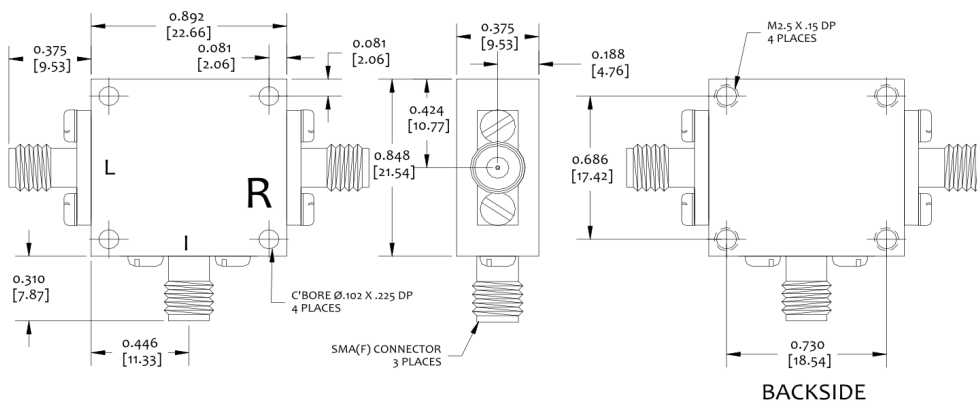
### Coaxial Package outline 'B'



### Coaxial Package outline 'L'



### Coaxial Package outline 'C'

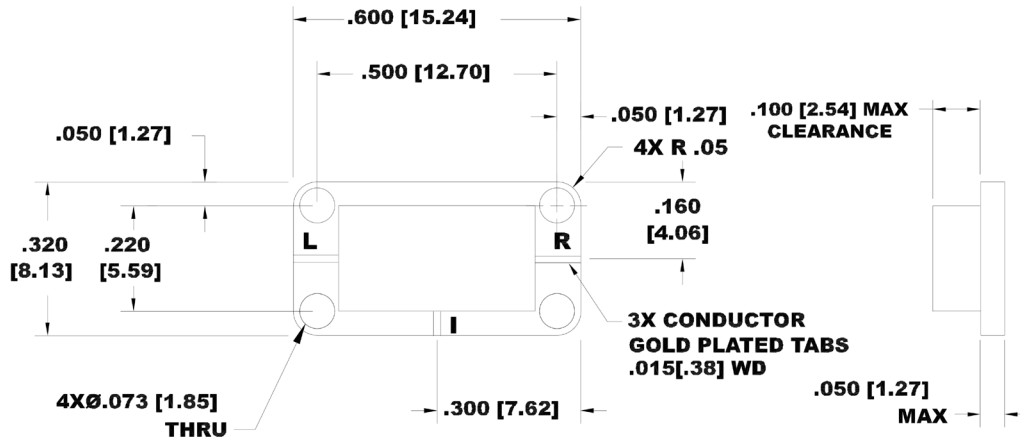


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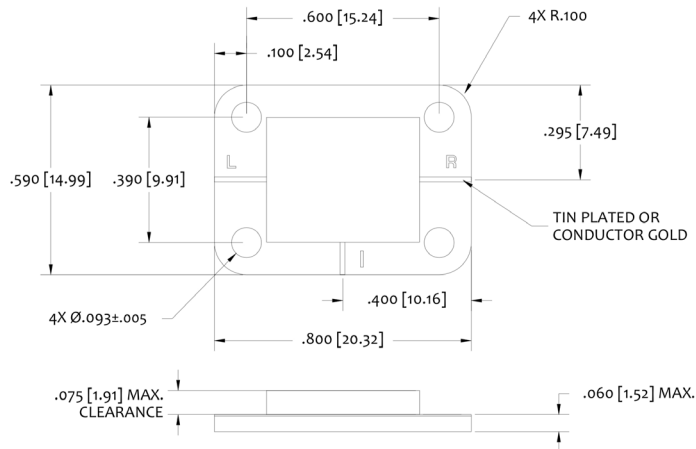
4.0 to 18.0

## Outline Drawings 2 of 2

### Drop in Package outline 'E1'



### Drop in Package outline 'F1'



### Drop in Package outline 'ZX'

