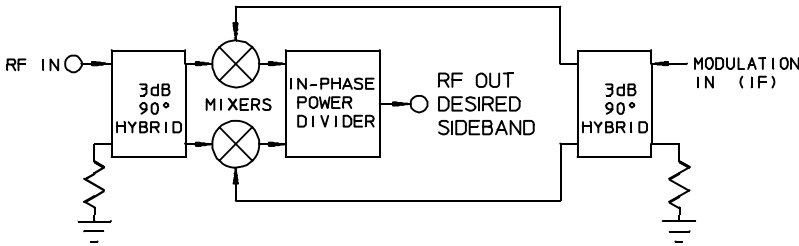


# SSM-2B Series SINGLE SIDEBAND MODULATORS

1000 to 3000 MHz / Image Rejection up to 25 dB / Two Quad Hybrids / SMA Package



## PRINCIPAL SPECIFICATIONS

Model Number	LO Center Frequency, $f_0$	Bandwidth MHz	Outline Style
SSM-2B-****/	1000 - 3000 MHz	10% of $f_0$	(See below)

A complete model number will be assigned with center frequency \*\*\*\* =  $f_0$  and slash number once a full specification is established with the factory.

### General Notes:

1. Single Sideband Modulators are integrated networks composed of an in-phase power divider, two double balanced mixers and at least one 90° quadrature hybrid.
2. Units in the SSM-2B series are suitable where the desired and undesired RF sidebands are too close to be effectively separated with a simple bandpass filter or where minimum group delay is required.
3. Merrimac Single Sideband Modulators are available in various package options.
4. Merrimac Single Sideband Modulators comply with the relevant sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

## GENERAL SPECIFICATIONS\*

### RF/IF Input Characteristics

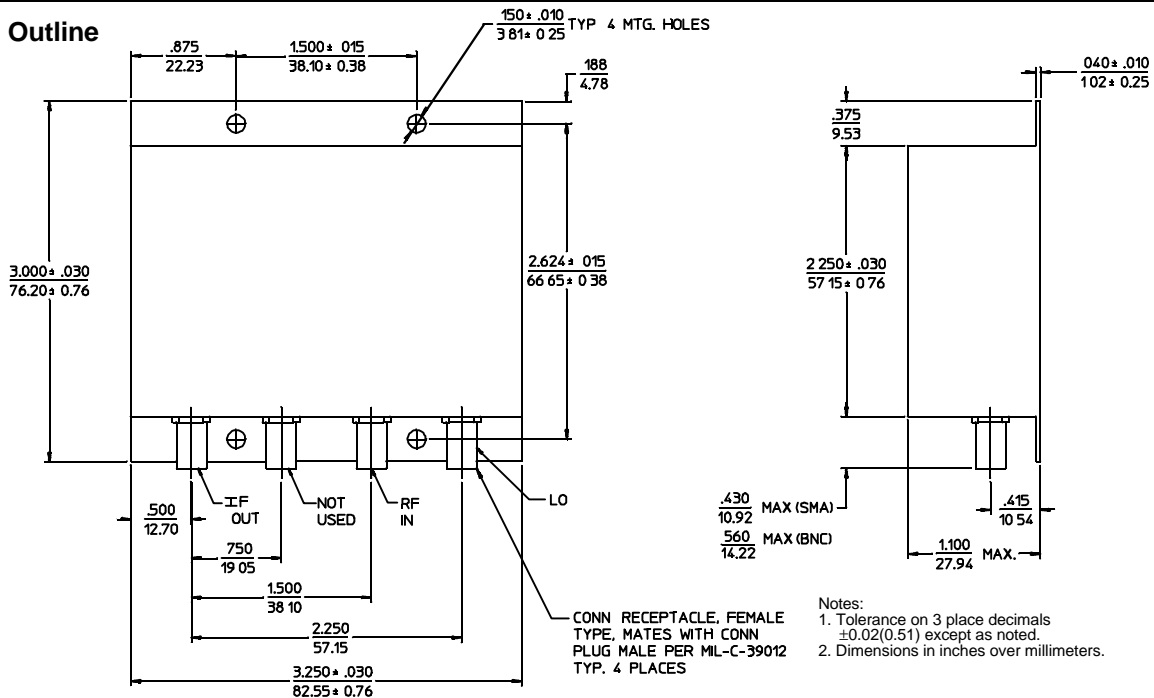
Impedance:	50 $\Omega$ nom..
VSWR:	2:1 max.
RF Power Level:	+10 dBm
IF Power Level:	0 dBm nom.
IF Bandwidth:	up to an octave
RF Bandwidth:	10%

### Output Characteristics

Conversion Loss:	9 dB max.
Sideband Suppression:	20 dB min.
Weight:	3 oz (84 g)
Temperature Range:	-55° to +85°C

\*Unit operated as upconverter

## Package Outline



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