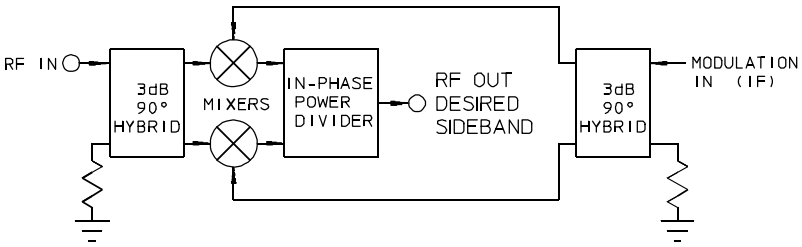
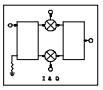
SSP-2 Series SINGLE SIDEBAND MODULATORS

10 to 4000 MHz / Image Rejection up to 30 dB / Two Quad Hybrids / Choice of Packages





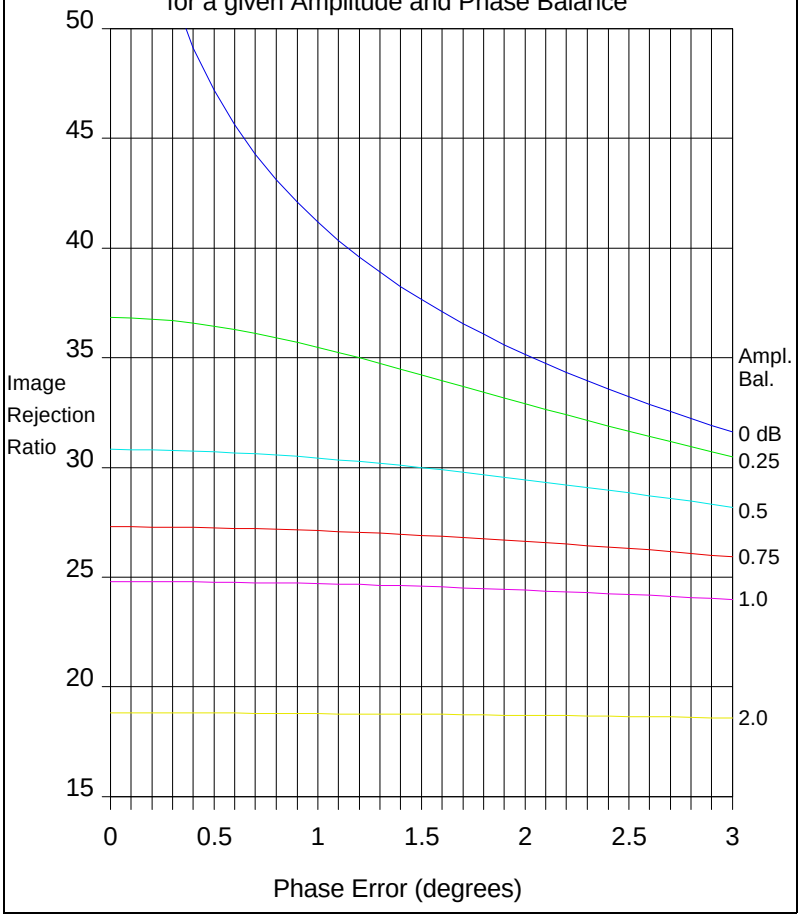
PRINCIPAL SPECIFICATIONS

Model Number	LO Center Frequency, f_o, MHz	Usable Bandwidth, MHz	Outline Style
SSP-2S-***/	10 - 1000	10% of f_o	S
SSP-2U-****/	1000 - 4000	10% of f_o	U

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

IMAGE REJECTION

for a given Amplitude and Phase Balance



*GENERAL SPECIFICATIONS**

RF/IF Input Characteristics

Impedance:	50 Ω nom..
VSWR:	1.5:1 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:	25 dB min.
Weight:	(See outlines)
Temperature Range:	-- 55° to +85°C

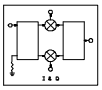
*Unit operated as upconverter

General Notes:

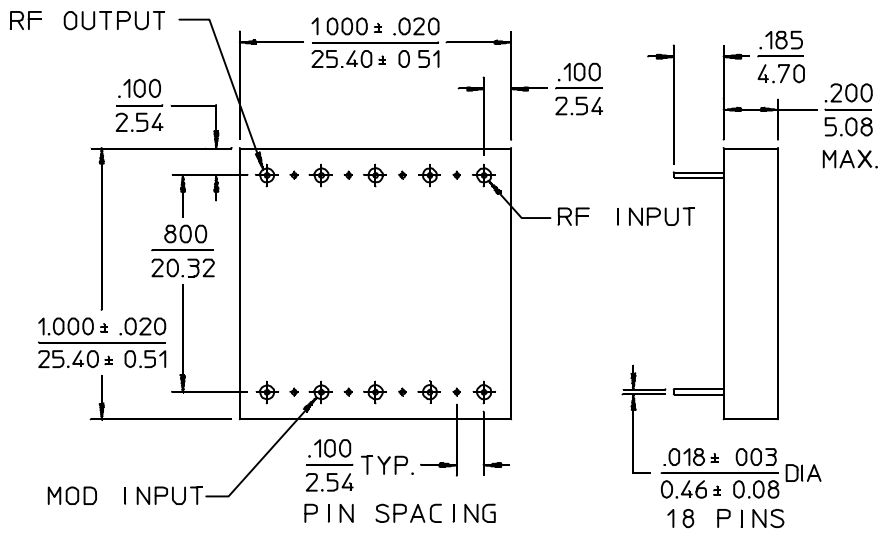
1. Single Sideband Modulators are integrated networks composed of an in-phase power divider, two double balanced mixers and at least one 90° quadrature hybrid.
2. The SSP-2 series is suitable for applications where the modulating signal is provided together with one in phase quadrature to it. This permits operation down to DC and eliminates the need for a second 90° quadrature hybrid.
3. Units in the SSP-2 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.
4. Merrimac Single Sideband Modulators are available in various package options.
5. 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.

14Feb96

For further information contact ***MERRIMAC / 41 Fairfield Pl, West Caldwell, NJ, 07006 / 973-575-1300 / FAX 973-575-0531***

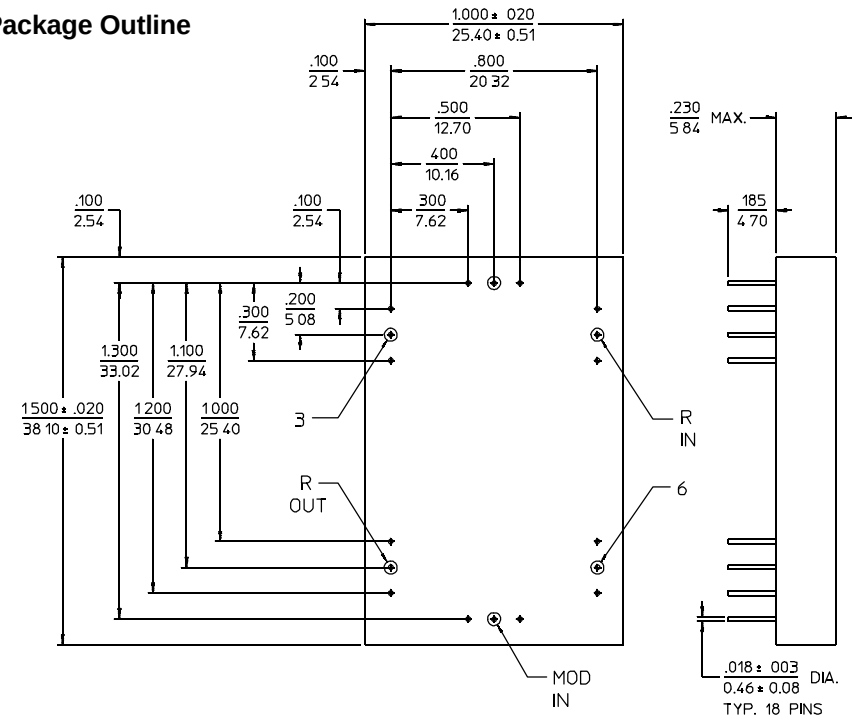


S- Meri-Pac™ Outline



NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. Dimensions marked with * apply only at body.
4. All unmarked pins are case ground.
5. Nominal Weight: 0.35 oz (10 g)

U- Package Outline



NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. Dimensions marked with * apply only at body.
4. All unmarked pins are case ground.
5. Nominal Weight: 0.55 oz (15.4 g)

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