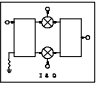
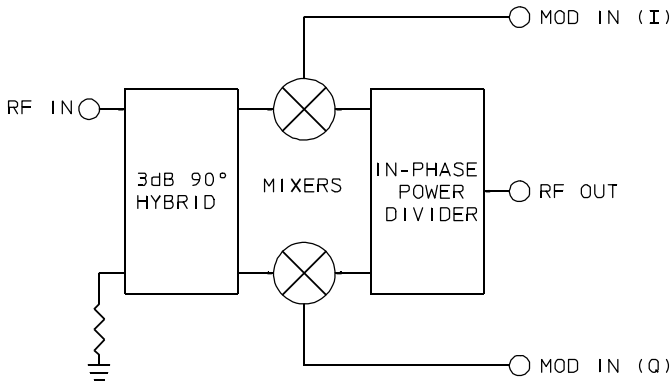


SSF-1E Series

SINGLE SIDEBAND MODULATORS

10 to 1000 MHz / 30 dB Sideband Rejection / Quadrature-Phased Baseband Inputs



PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, f_0 , MHz	Usable Bandwidth, MHz
SSF-1E-***B	10 - 1000	10% of f_0

For complete Model Number replace *** with desired Center Frequency in MHz.

GENERAL SPECIFICATIONS*

RF Input Characteristics

Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
RF Power Level:	+10 dBm nom.

I & Q Modulation Inputs

Power Level:	- 3 dBm
Bandwidth:	DC to 10% of RF

Output Characteristics

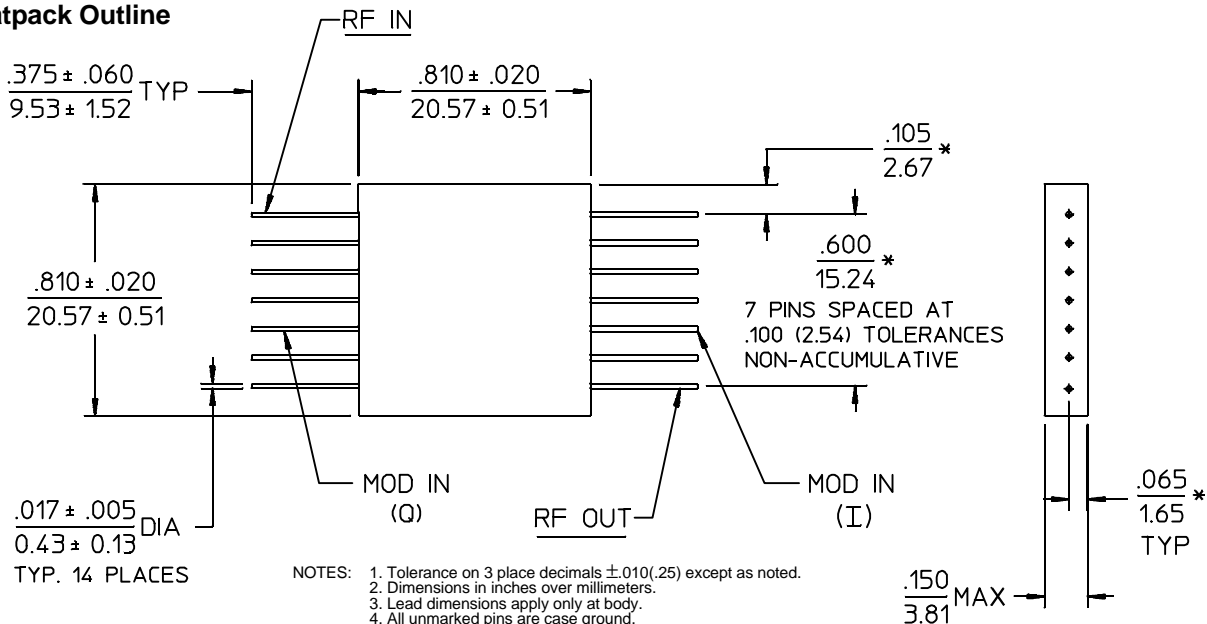
Conversion Loss:	9 dB max.
Sideband Rejection:	30 dB min.
Carrier Suppression:	25 dB min.
Weight, nominal:	0.32 oz (9 g)
Operating Temp:	- 55° to +85°C

*Device used as upconverter

General Notes:

- Single Sideband Modulators are integrated networks composed of an in-phase power divider, two double balanced mixers and at least one 90° quadrature hybrid.
- The SSF-1E 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.
- Units in the SSF-1E 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.
- Merrimac Single Sideband Modulators are available in various package options.
- 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.

E- Flatpack Outline



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