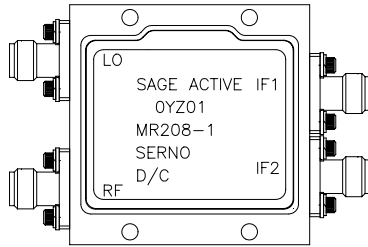


**SPECIFICATION BULLETIN**      **MR208-1 MIXER (QIFM)**  
**RF/LO: 2 to 4 GHz**    **IF: DC to 100 MHz**



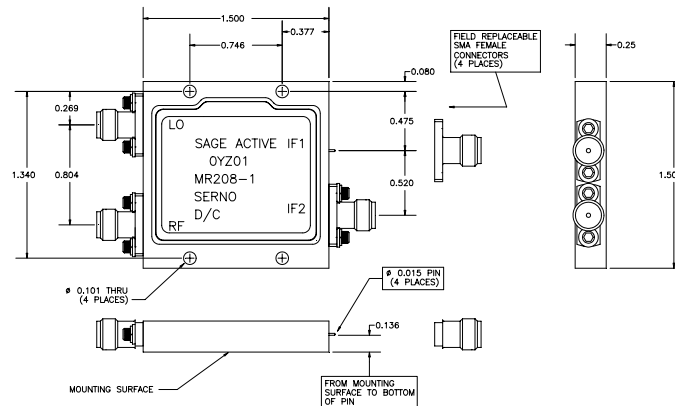
**Standard Product Features**

- Broadband RF Coverage
- Field Replaceable SMA Connectors
- Suitable for Stripline Integration
- Quadrature Phase  $\pm 4^\circ$  Typical
- Amplitude Balance  $\pm 0.4$  dB Typical
- VSWR 1.5:1 Typical
- Available as a hermetic product

SPECIFICATIONS	TYPICAL	Min.	Max.
RF/LO Frequency Range	----	2 GHz	4 GHz
IF Frequency Range (3 dB Bandwidth)	----	DC	100 MHz
Conversion Loss	10 dB	----	12 dB
Quadrature Phase Balance	$\pm 4^\circ$	----	$\pm 10^\circ$
Amplitude Balance	$\pm 0.4$ dB	----	$\pm 1.0$ dB
DC Offset	$\pm 4$ mV	----	$\pm 10$ mV
LO Drive Level	13 dBm	12 dBm	14 dBm
Isolation, LO to RF	30 dB	20 dB	---
LO to IF	22 dB	15 dB	---
VSWR, RF	2.2:1	---	2.5:1
LO	1.4:1	---	2.0:1
Input 1 dB Compression (Input)	6 dBm	2 dBm	---
Input Two-Tone Third Order IP (IP3)	13 dBm	10 dBm	---
Operating Temperature Range ( $^\circ\text{C}$ )	---	-40	+85
Storage Temperature Range ( $^\circ\text{C}$ )	---	-65	+125

Detail Outline Information: Sage Active Microwave Drawing # 11202

**OUTLINE DRAWING**



NOTES:  
1. MATERIAL: ALUMINUM 6061-T6  
2. FINISH: ELECTROLESS NICKEL PLATE PER MIL-C-26074  
100 to 300 MICRO-INCHES THICK. (Direct Deposit)