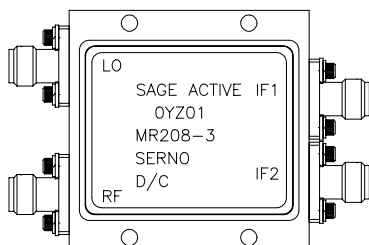


|                               |                                                                            |
|-------------------------------|----------------------------------------------------------------------------|
| <b>SPECIFICATION BULLETIN</b> | <b>MR208-3 MIXER (QIFM)</b><br><b>RF/LO: 6 to 10 GHz IF: DC to 100 MHz</b> |
|-------------------------------|----------------------------------------------------------------------------|



### Standard Product Features

- Field Replaceable SMA Connectors
- Suitable for Stripline Integration
- Quadrature Phase  $\pm 4^\circ$  Typical
- Amplitude Balance  $\pm 0.5$  dB Typical
- VSWR 1.5:1 Typical
- Available as a hermetic product

| SPECIFICATIONS                             | TYPICAL       | Min.   | Max.           |
|--------------------------------------------|---------------|--------|----------------|
| RF/LO Frequency Range                      | ---           | 6 GHz  | 10 GHz         |
| IF Frequency Range (3 dB Bandwidth)        | ---           | DC     | 100 MHz        |
| Conversion Loss                            | 10 dB         | ---    | 12 dB          |
| Quadrature Phase Balance                   | $\pm 5^\circ$ | ---    | $\pm 10^\circ$ |
| Amplitude Balance                          | $\pm 0.6$ dB  | ---    | $\pm 1.5$ 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 <sub>3</sub> | 13 dBm        | 10 dBm | ---            |
| Operating Temperature Range (°C)           | ---           | -40    | +85            |
| Storage Temperature Range (°C)             | ---           | -65    | +125           |

Detail Outline Drawing Information: Sage Active Microwave Drawing # 11208

### OUTLINE DRAWING

