

**Features**

- Frequency Range: LO & RF 2– 500 MHz, IF DC – 500 MHz
- L.O. Drive: +3 dBm
- Industry Standard SMT package
- Available in Tape-and -Reel
- Low Cost

**Description**

The MXB-0502-3 is a low drive level, surface mount mixer designed for applications that require small, low cost and highly reliable surface mount components. This mixer is a double balanced design for wideband high dynamic range use in communications up and down-converter applications.

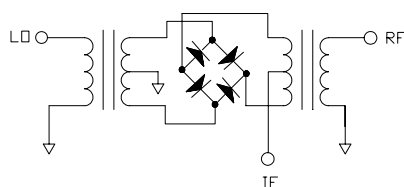
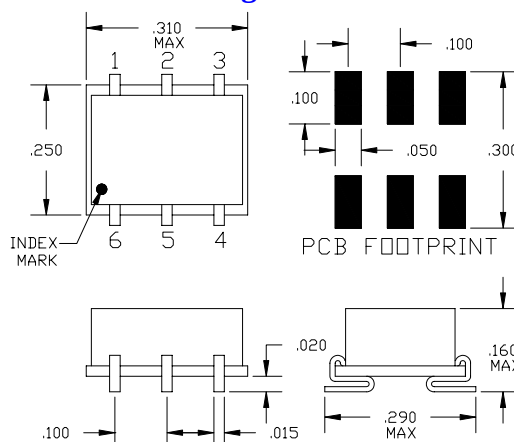
**Specifications**

| Parameter              | Min | Typ | Max |
|------------------------|-----|-----|-----|
| Frequency Range (MHz)  | 2   |     | 500 |
| Conversion Loss (dB)   |     | 6.0 | 8.0 |
| LO – RF Isolation (dB) | 25  | 32  |     |
| LO – IF Isolation (dB) | 20  | 30  |     |
| IIP <sub>3</sub> (dBm) |     | +11 |     |

Notes: Test Conditions-LO +3dBm, RF -10 dBm, IF 30 MHz.  
 Typical values represent Mid-band performance @ 25°C.

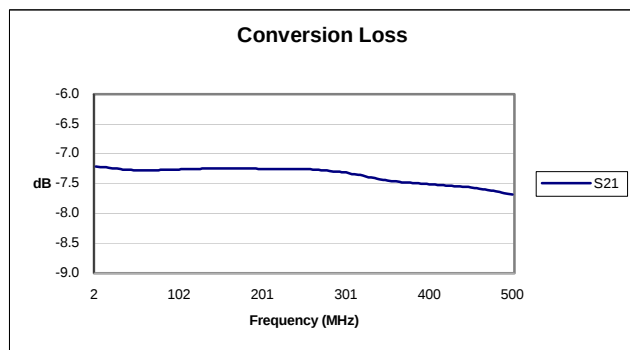
**SURFACE MOUNT MIXER****Absolute Maximum Ratings**

| Parameter             | Maximum        |
|-----------------------|----------------|
| RF Power              | + 13 dBm       |
| Operating Temperature | -50 to +80 °C  |
| Storage Temperature   | -65 to +100 °C |
| Re-flow Temperature   | + 240 °C       |

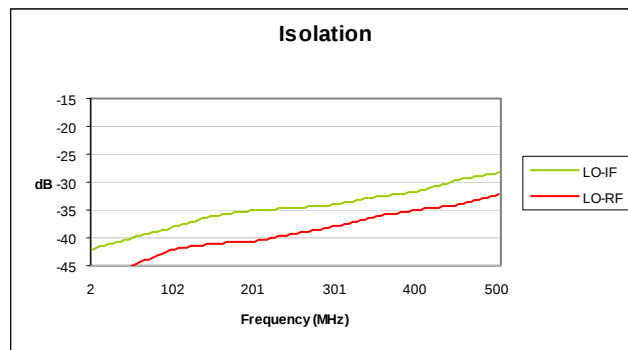
**Schematic****Package – S07****Pin Functions**

| Function  | Pin   |
|-----------|-------|
| LO INPUT  | 1     |
| RF INPUT  | 4     |
| IF OUTPUT | 5     |
| GROUND    | 2,3,6 |

Typical Test Data – Conversion Loss



Typical Test Data – LO-RF and LO-IF Isolation



Specifications and information on this data sheet are subject to change without notice..