

## Features

- Frequency Range: LO & RF 5– 1500 MHz, IF 5 – 1500 MHz
- L.O. Drive: +13 dBm
- Industry Standard SMT package
- Available in Tape-and -Reel
- Low Cost

## Description

The MXB-2501-13 is a medium-high 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.

## SURFACE MOUNT MIXER



## Specifications

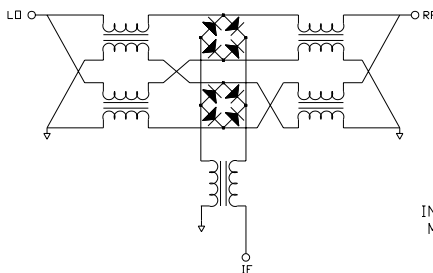
| Parameter              | Min | Typ | Max  | Min | Typ  | Max  |
|------------------------|-----|-----|------|-----|------|------|
| Frequency Range (MHz)  | 5   |     | 1500 |     | 1500 | 2500 |
| Conversion Loss (dB)   |     | 7.0 | 8.0  |     | 8.5  | 9.0  |
| LO – RF Isolation (dB) | 25  | 32  |      | 25  | 34   |      |
| LO – IF Isolation (dB) | 20  | 27  |      | 20  | 22   |      |
| IIP <sub>3</sub> (dBm) |     | 20  |      |     | 20   |      |

## Absolute Maximum Ratings

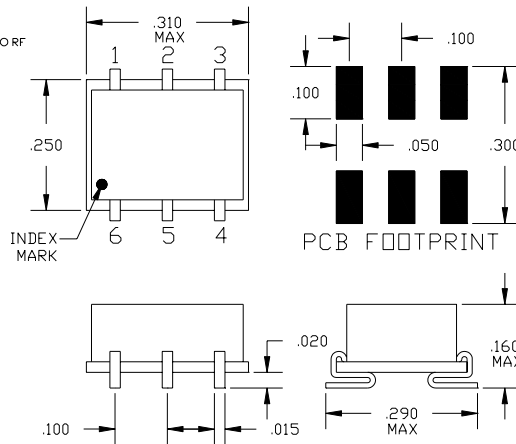
| Parameter             | Maximum        |
|-----------------------|----------------|
| RF Power              | + 20 dBm       |
| Operating Temperature | -50 to +80 °C  |
| Storage Temperature   | -65 to +100 °C |
| Re-flow Temperature   | + 240 °C       |

Notes: Test Conditions-LO +13 dBm, RF -10 dBm, IF 30 MHz.  
Typical values represent Mid-band performance @ 25°C.

## Schematic



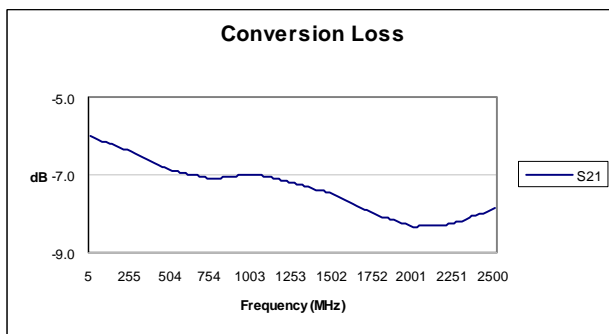
## Package – S07



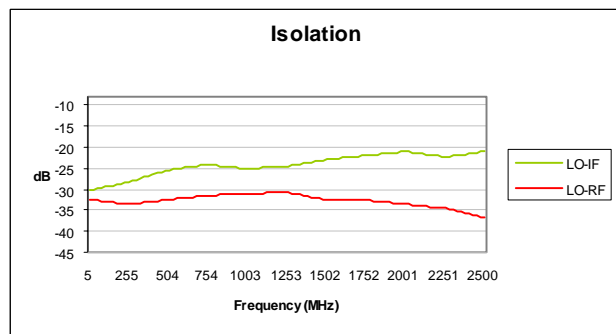
## Pin Functions

| 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.