

## Features

- Frequency Range: LO & RF 0.5 – 500 MHz, IF DC – 500 MHz
- L.O. Drive : +7 dBm
- Industry Standard SMT package
- Available in Tape-and -Reel
- Low Cost

## Description

The MXB-0501-7 is a medium-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.

## SURFACE MOUNT MIXER



## Specifications

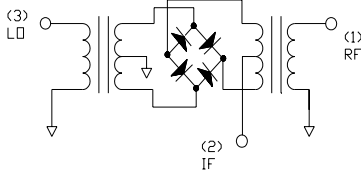
| Parameter              | Min | Typ | Max |
|------------------------|-----|-----|-----|
| Frequency Range (MHz)  | 0.5 |     | 500 |
| Conversion Loss (dB)   |     | 5.5 | 8.0 |
| LO – RF Isolation (dB) | 20  | 36  |     |
| LO – IF Isolation (dB) | 20  | 26  |     |
| IIP <sub>3</sub> (dBm) |     | 13  |     |

## Absolute Maximum Ratings

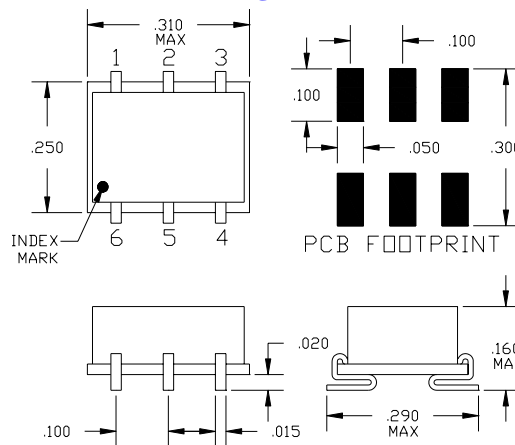
| Parameter             | Maximum        |
|-----------------------|----------------|
| RF Power              | + 13 dBm       |
| Operating Temperature | -50 to +80 °C  |
| Storage Temperature   | -65 to +100 °C |
| Re-flow Temperature   | + 240 °C       |

Notes: Test Conditions-LO +7 dBm, RF -10 dBm, IF 30 MHz  
Typical values represent Mid-band performance @ 25° C.

## Schematic



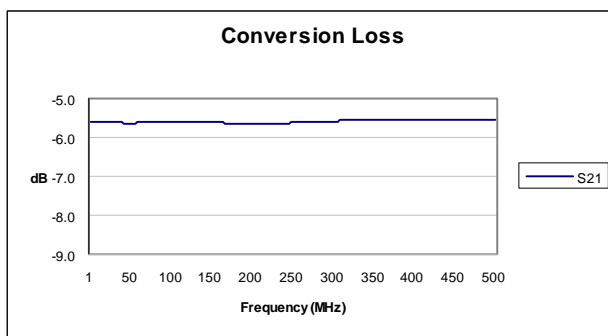
## Package – S07



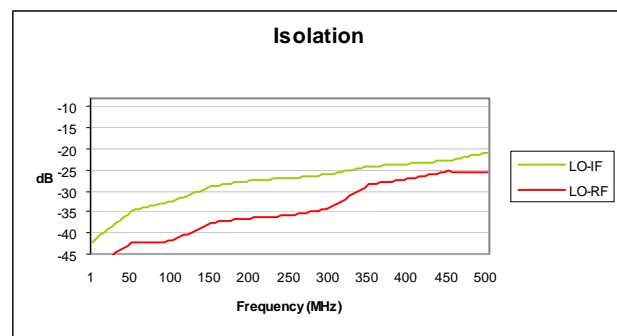
## Pin Functions

| 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.