

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

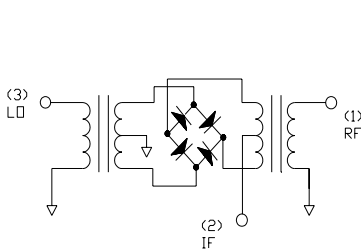
| Parameter | Min | Typ | Max |
|------------------------|-----|-----|-----|
| Frequency Range (MHz) | 0.5 | | 500 |
| Conversion Loss (dB) | | 5.5 | 8.0 |
| LO – RF Isolation (dB) | 20 | 36 | |
| LO – IF Isolation (dB) | 20 | 26 | |
| IIP ₃ (dBm) | | 13 | |

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

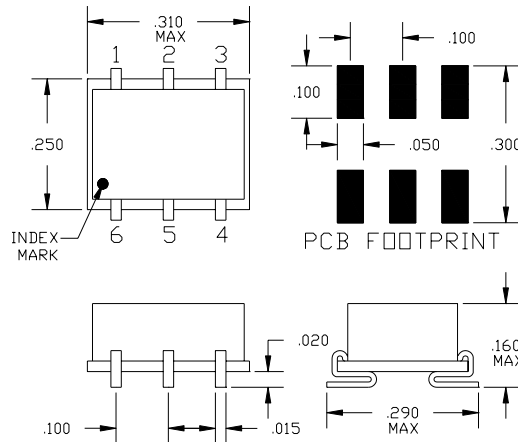
Absolute Maximum Ratings

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

Schematic



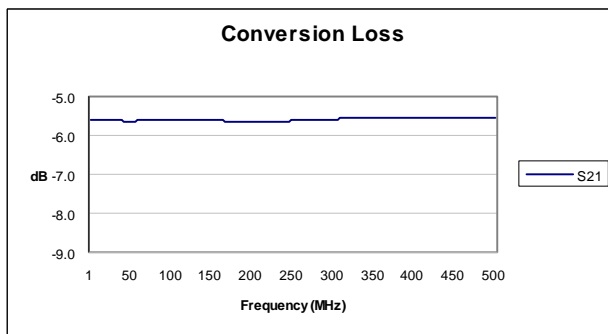
Package – S07



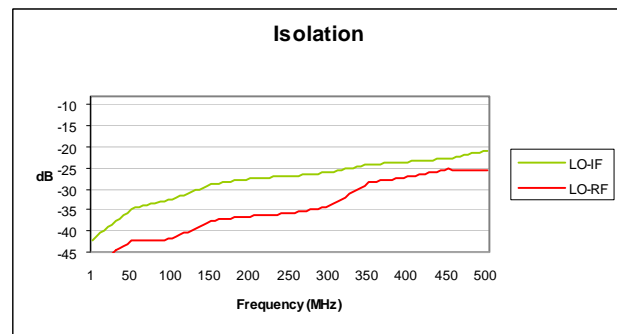
Pin Functions

| 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.