

## SURFACE MOUNT MIXER

## Features

- Frequency Range: LO & RF 2– 500 MHz, IF 2 – 500 MHz
- L.O. Drive: +13 dBm
- Industry Standard SMT package
- Available in Tape-and -Reel
- Low Cost

## Description

The MXB-0502-13 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.



## Specifications

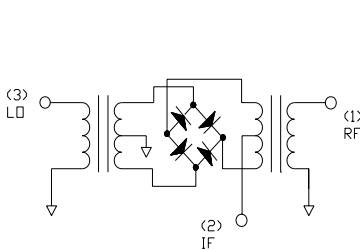
Parameter	Min	Typ	Max
Frequency Range (MHz)	2		500
Conversion Loss (dB)		6.5	8.0
LO – RF Isolation (dB)	30	40	
LO – IF Isolation (dB)	22	38	
IIP <sub>3</sub> (dBm)		+20	

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

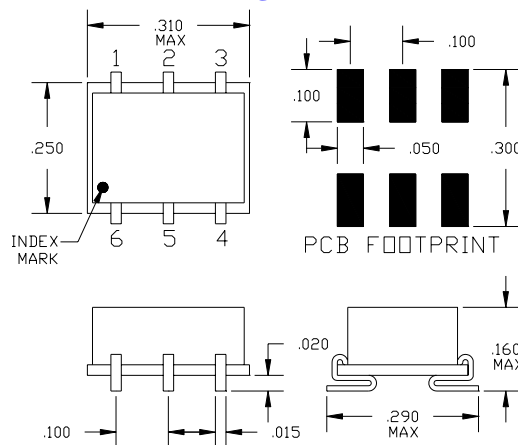
## Absolute Maximum Ratings

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

## Schematic



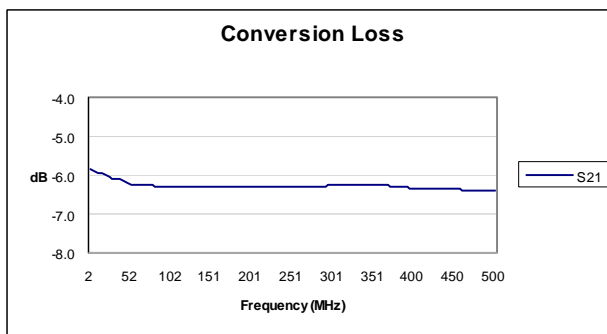
## Package – S07



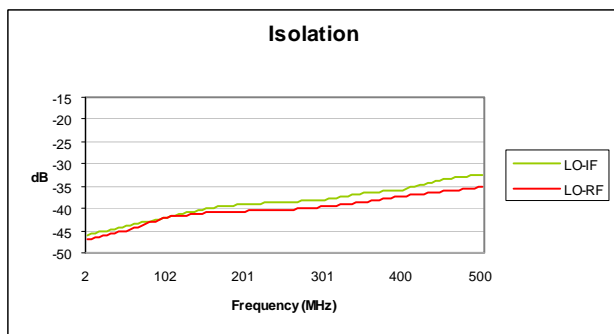
## Pin Functions

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.