



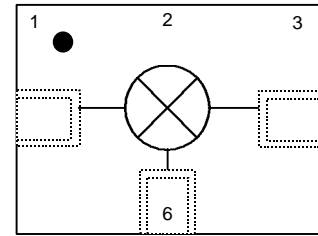
# SME 901-17

Quad-Diode Mixer

## Product Features

- High IIP3 +29 dBm
- RF Freq 700 - 980 MHz
- LO Freq 800 - 1000 MHz
- IF Freq 20 - 100 MHz
- LO Drive Level +17 dBm

## Functional Diagram



Function	Pin No.
Ground	1-3
RF	4
Ground	5
IF	6
Ground	7
LO	8

## Specifications

Parameters	Units	Minimum	Typical	Maximum	Comments
RF Frequency	MHz	800		1000	
LO Frequency	MHz	700		980	
IF Frequency	MHz	20		100	
SSB Conversion Loss	dB		6.2		
L-R Isolation	dB		40		
L-I Isolation	dB		27		
IIP3	dBm		+29		
LO Drive	dBm		+17		
RF - Return Loss	dB		15		
LO - Return Loss	dB		14		
IF - Return Loss	dB		18		

Test conditions unless otherwise noted  
 1. Tested in a 50 Ohm System, low Side LO.

## Recommended Maximum Rating

Parameters	Rating
Operating Case Temperature	-40 to +70 °C
Storage Temperature	-65 to +100 °C
RF Input Power at 25°C (continuous)	+20 dBm

## Ordering Information

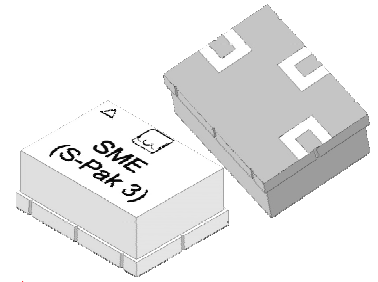
Part No.	Description
SME 901-17	Diode Mixer (Available in Tape & Reel)
SME 901-17-PCB	Fully Assembled App Ckt.

This document contains information on a new product.  
 Specifications and information are subject to change without notice

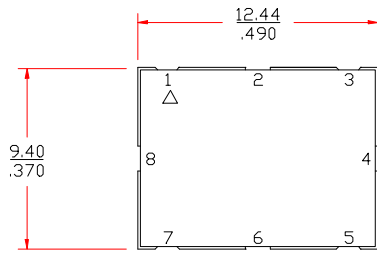


# SME 901-17

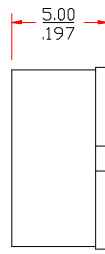
## Quad-Diode Mixer



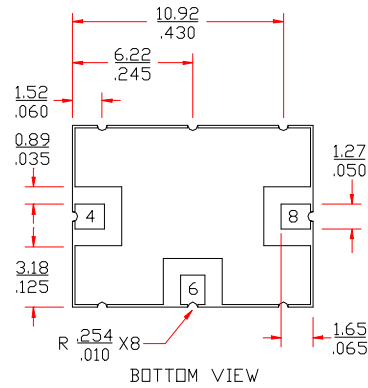
### OUTLINE DRAWING



TOP VIEW

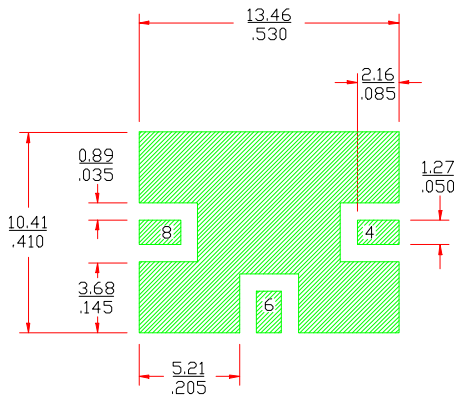


mm  
inch



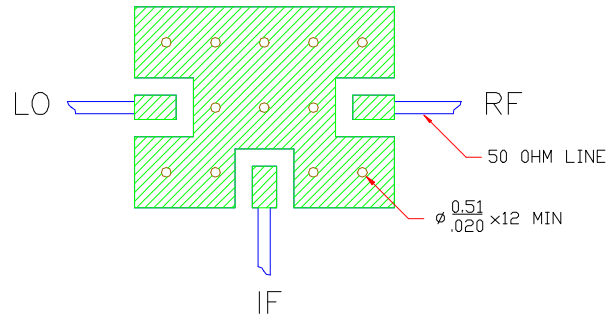
BOTTOM VIEW

### LAND PATTERN



TOP VIEW

### MOUNTING CONFIGURATION



FUNCTION	PIN NO.
GROUND	1-3
RF	4
GROUND	5
IF	6
GROUND	7
LO	8

- Notes:
1. Ground vias are critical for thermal and RF grounding considerations.
  2. A minimum of 12 ground vias are required.
  3. If your PCB design rules allow, ground vias should be placed under the land pattern for better RF and thermal performance. Otherwise ground vias should be placed as close to land pattern as possible.
  4. Trace width depends on PC board.

This document contains information on a new product. Specifications and information are subject to change without notice.