Surface Mount

Frequency Mixer

Level 10 (LO Power +10dBm) 20 to 1500 MHz

Maximum Ratings
Operating Temperature -55°C to 100°C
Storage Temperature -55°C to 100°C
RF Power 50mW
IF Current 40mA
Permanent damage may occur if any of these limits are exceeded.

Pin Connections
LO 4
RF 1
IF 2
GROUND 3
CASE GROUND 3

Features
• low conversion loss, 6.9 dB typ.
• high L-R isolation, 42 dB typ.
• rugged welded construction

Applications
• cellular
• satellite distribution
• GSM/ISM

Electrical Specifications

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>CONVERSION LOSS (dB)</th>
<th>LO-RF ISOLATION (dB)</th>
<th>LO-IF ISOLATION (dB)</th>
<th>IP3 @ CENTER BAND (dBm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO/RF IF</td>
<td>mid-Band</td>
<td>L</td>
<td>M</td>
<td>U</td>
</tr>
<tr>
<td>20-1500 DC-1000</td>
<td>6.9</td>
<td>0.27</td>
<td>8.5</td>
<td>9.0</td>
</tr>
</tbody>
</table>

1 dB COMP. +5 dBm typ.

Features

- GSM/ISM
- satellite distribution
- rugged welded construction

Suggested PCB Layout (PL-081)

Outline Drawing

Outline Dimensions (inch/mm)

A B C D E F G
.50 .48 .255 .240 .23 .21 .06
12.70 12.19 8.68 8.61 5.84 5.33 1.52

H J K L M N wt
.100 .09 16 .020 .09 .005 .005 grams
2.54 2.29 3.06 0.51 2.29 1.9

Democ Board MCL PIN: TB-201
Suggested PCB Layout (PL-081)

Notes
1. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
2. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
3. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp
Performance Charts

TUF-5LHSM+

Notas
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