



Description

Mi-wave supplies 971 series mixer with I (in phase) and Q (quadrature phase) outputs. They are offered over the RF range of DC to 110 GHz. Good LO to RF isolation is achieved over a relatively broad RF and LO frequency ranges. Typical IF range is from DC to 5 GHz. Both waveguide and coaxial interfaces are offered as options for RF and LO ports. The mechanical design of these mixers is very compact and can be customized to suit any specific application and outline requirement. These IQ mixers find applications in communication equipment, radar sensors and instrumentation receivers.

- *Low Conversion Loss*
- *Wide Choice of IF Inputs*
- *With or Without RF Filter*



TEST DATA SHEET

Customer: _____

Model No: 971E-79/387

Serial No: 109

Item No.	Specification	Test Data								
1	RF Frequency	76.5GHz - 81.5GHz								
2	LO Frequency	76.5GHz - 81.5GHz								
3	IF Frequency	DC - 1GHz								
4	Conversion Loss (dB)	<table border="1"> <thead> <tr> <th>76.5GHz</th> <th>78 GHz</th> <th>80GHz</th> <th>81.5GHz</th> </tr> </thead> <tbody> <tr> <td>11.9</td> <td>12</td> <td>12.2</td> <td>12.2</td> </tr> </tbody> </table>	76.5GHz	78 GHz	80GHz	81.5GHz	11.9	12	12.2	12.2
76.5GHz	78 GHz	80GHz	81.5GHz							
11.9	12	12.2	12.2							
5	LO Power	<table border="1"> <thead> <tr> <th>7dBm typ</th> <th>+12dBm max</th> </tr> </thead> <tbody> <tr> <td>7dBm</td> <td>+12dBm max</td> </tr> </tbody> </table>	7dBm typ	+12dBm max	7dBm	+12dBm max				
7dBm typ	+12dBm max									
7dBm	+12dBm max									
6	RF - LO Isolation	30dB typ								
7	DC Bias	<table border="1"> <thead> <tr> <th>+8V</th> <th>+12V max</th> </tr> </thead> <tbody> <tr> <td>+8V</td> <td>+12V max</td> </tr> </tbody> </table>	+8V	+12V max	+8V	+12V max				
+8V	+12V max									
+8V	+12V max									

Notes:
 1) Mixer Data taken at +25°C
 2) Reverse Biasing will destroy Mixer (Warranty Void)
 3) Warranty Void if VDC, LO and/or RF Input Power exceeds maximum rating specified above

Ordering Information

