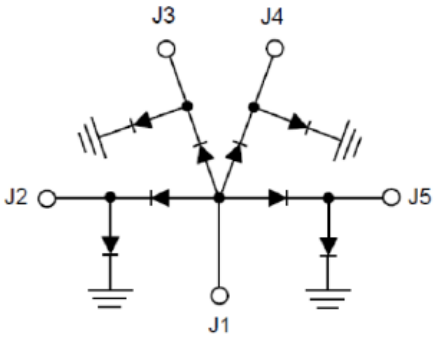
Features

- Frequency: 0.05-20GHz
- Insertion Loss: 0.7dB typ.
- Isolation: 54dB typ.
- P-1dB: 30dBm
- Input/Output: 50Ω
- Die Size: 2.02x 1.47x 0.1 mm

Functional Block Diagram



Typical Applications

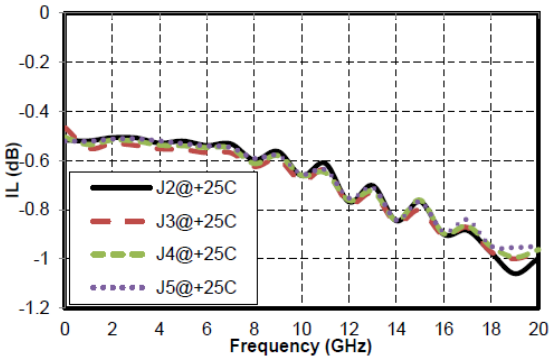
- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

Electrical Specifications

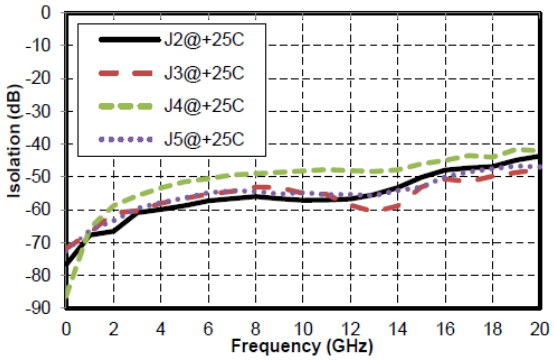
TA = +25ºC

Parameters	Min.	Typ.	Max.	Units
Frequency Range		**0.05-20**		**GHz**
Insertion Loss	**-**	**0.7**	**1.1**	**dB**
Isolation	**41**	**54**	**-**	**dB**
Input Return Loss	**10**	**16**	**-**	**dB**
Output Return Loss	**11**	**17**	**-**	**dB**
P-1dB	**-**	**30**	**-**	**dBm**
Switching Speed	**-**	**20**	**-**	**ns**

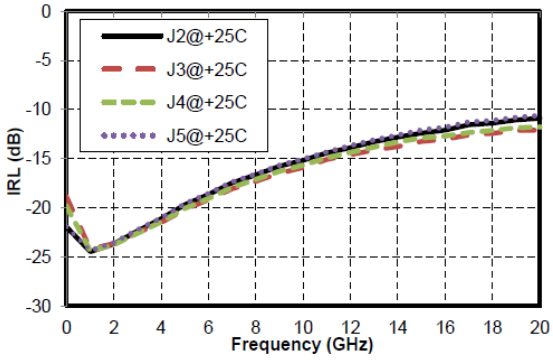
Insertion Loss vs. Operating Frequency



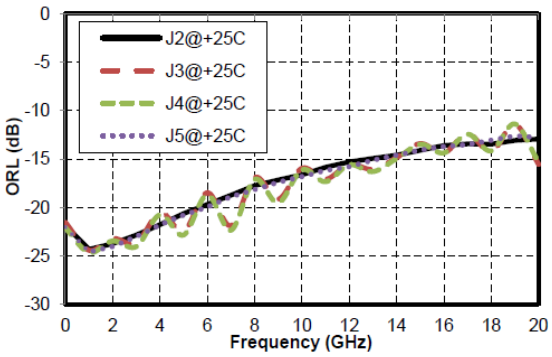
Isolation vs. Operating Frerquency



Input Return Loss vs. Operating Frequency



Output Return Loss vs. Operating Frequency

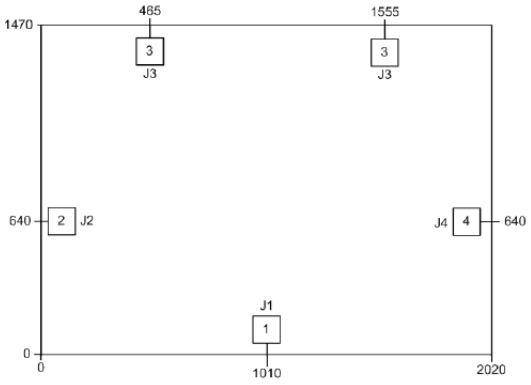


Typical Driver Connections

CONTROL LEVEL (DC CURRENT)				RF OUTPUT STATE			
J2	J3	J4	J5	J2-J1	J3-J1	J4-J1	J5-J1
-10mA	+10mA	+10mA	+10mA	Low Loss	Isolation	Isolation	Isolation
+10mA	-10mA	+10mA	+10mA	Isolation	Low Loss	Isolation	Isolation
+10mA	+10mA	-10mA	+10mA	Isolation	Isolation	Low Loss	Isolation
+10mA	+10mA	+10mA	-10mA	Isolation	Isolation	Isolation	Low Loss

Outline Drawing

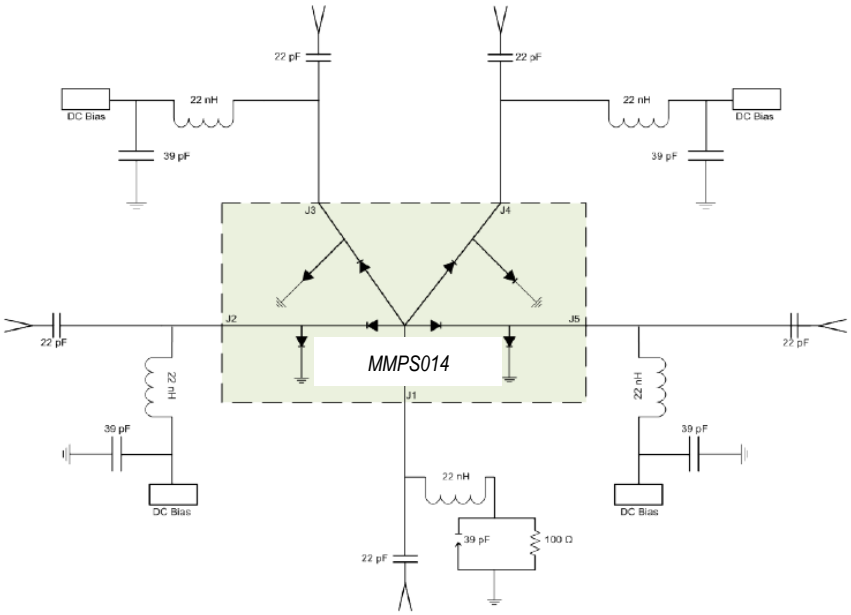
All Dimensions in μm



Pad Description

Pad	Function	Description
1,2,3,4,5	J1, J2, J3, J4, J5	RF signal port
Die bottom	GND	Die bottom must be connected to RF/DC ground.

Assembly Drawing



Notes:

1. Die thickness: 100um
2. Typical bond pad is 100*100 μm²
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)
6. No connection required for unlabeled bond pads

Maximum Ratings:

1. Maximum input voltage: 25V
2. Maximum input power: +36dBm CW
3. Operating temperature: -55℃ to +85℃
4. Storage temperature: -65℃ to +150℃