



### DESCRIPTION

AMCOM's AM001209XD-P3 is a high IP3 passive double balanced mixer operates with LO drive level range of +10dBm to +16dBm.



### FEATURES

- LO/RF: 10-1200MHz
- IF: DC-1200MHz
- LO Level: +13dBm
- Conversion Loss: 8.0dB
- RF Input: Up to +9dBm
- IP3: +22dBm
- SMA Connector

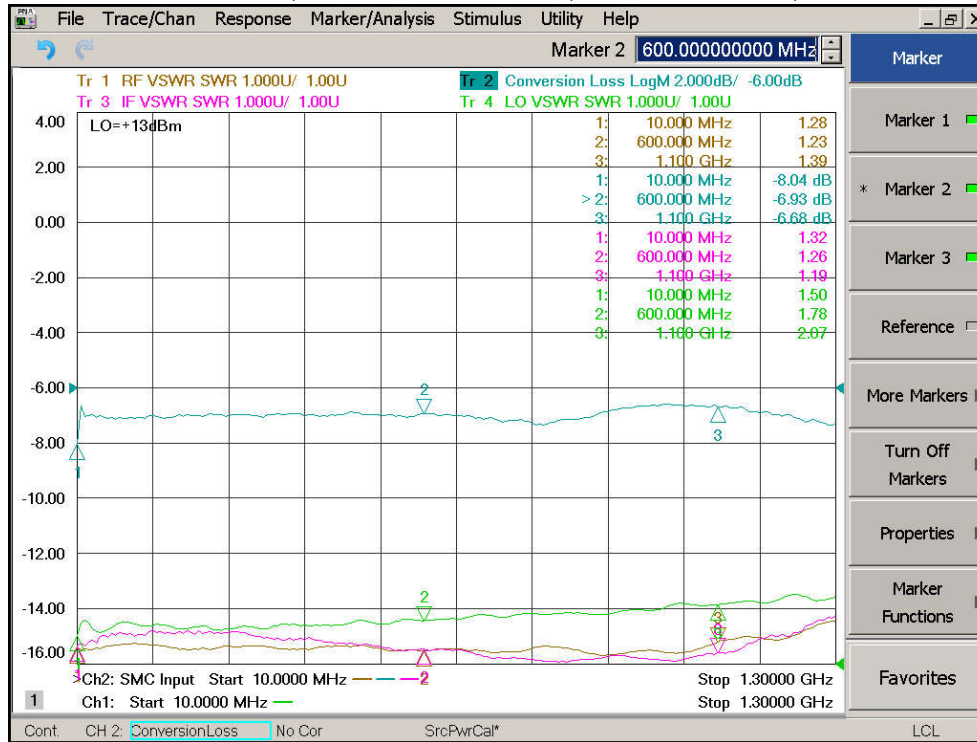
### APPLICATIONS

- Telecom Infrastructure
- Military & Aerospace
- VSAT
- Test & Instrumentation
- Radar
- Communication

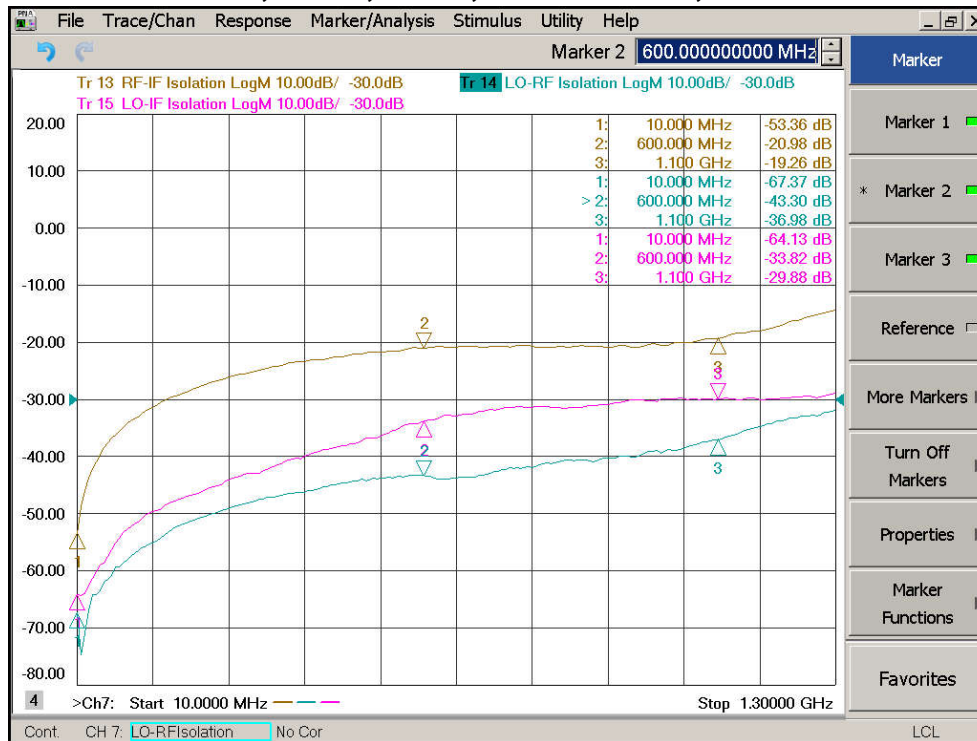
### Electrical Specifications @ +25 °C, IF=10MHz, LO=+13dBm, 50 Ω

| Parameter            | Unit | Minimum | Typical | Maximum |
|----------------------|------|---------|---------|---------|
| Frequency Range      |      |         |         |         |
| LO/RF                | MHz  | 10      |         | 1200    |
| IF                   | MHz  | DC      |         | 1200    |
| Conversion Loss      | dB   |         | 8.0     | 9.0     |
| LO-RF Isolation      |      |         |         |         |
| 10-100 MHz           | dB   | 45      | 62      |         |
| 100-600MHz           | dB   | 32      | 45      |         |
| 600-1200MHz          | dB   | 26      | 40      |         |
| LO-IF Isolation      |      |         |         |         |
| 10-100MHz            | dB   | 40      | 68      |         |
| 100-600MHz           | dB   | 27      | 42      |         |
| 600-1200MHz          | dB   | 20      | 30      |         |
| RF VSWR              |      |         | 1.5:1   | 2.0:1   |
| IF VSWR              |      |         | 1.5:1   | 2.0:1   |
| RF Input Power up to | dBm  | +7      | +9      |         |
| IP3 (Center Band)    | dBm  | +19     | +22     |         |

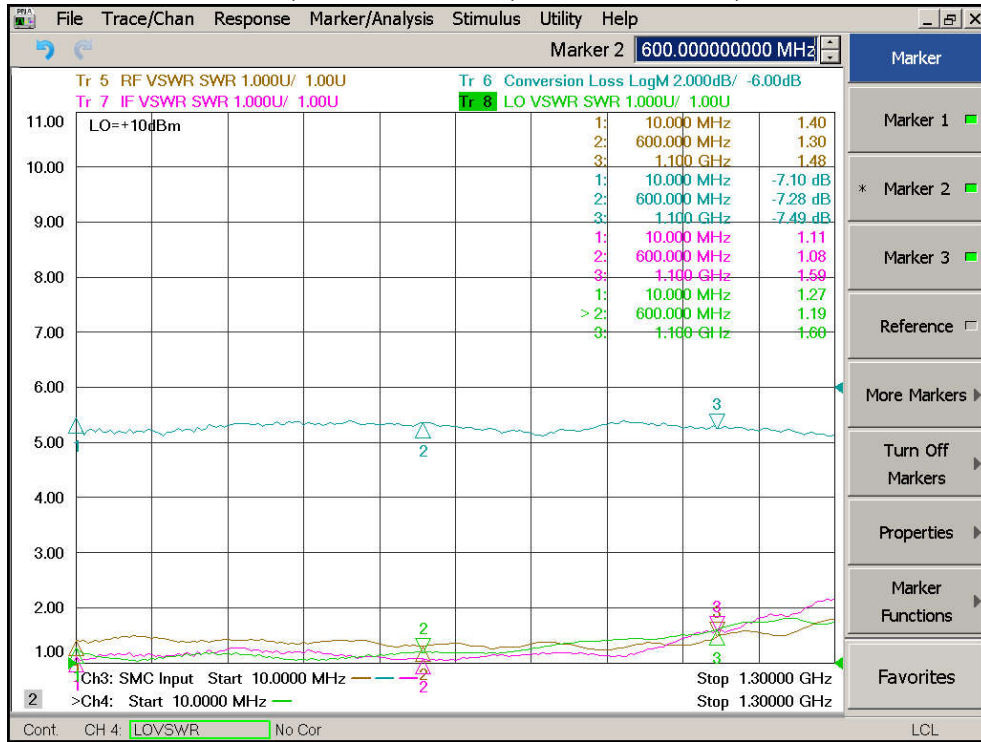
**Conversion Loss, RF/IF/LO VSWR, LO=+13dBm, IF=10MHz**



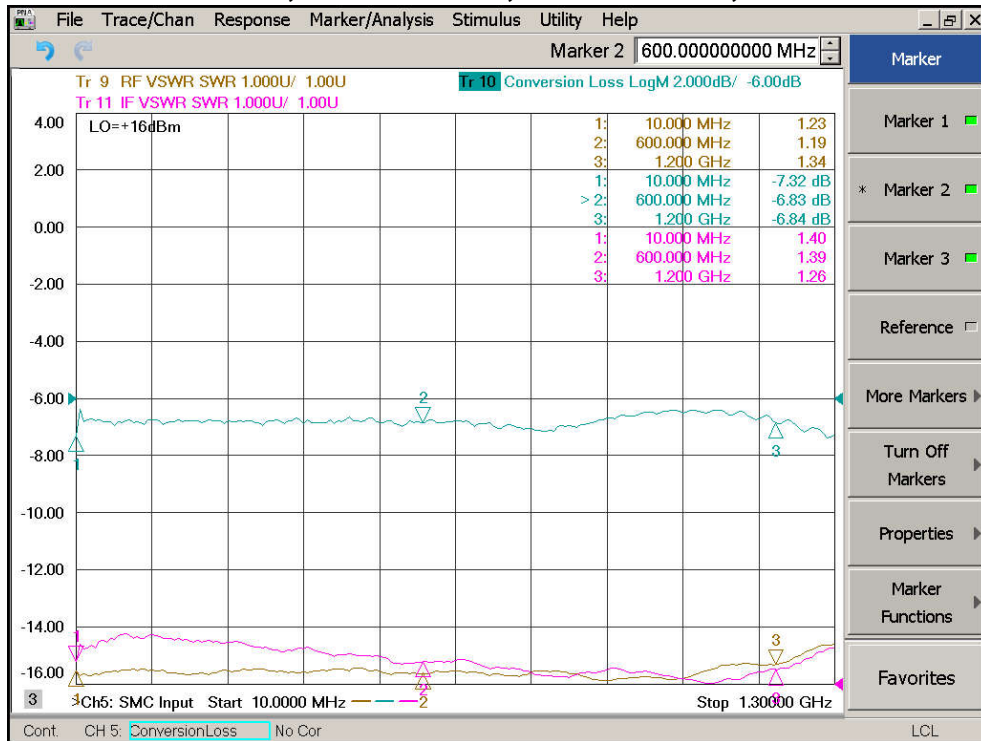
**Isolation LO-RF, LO-IF, RF-IF, LO=+13dBm, IF=10MHz**



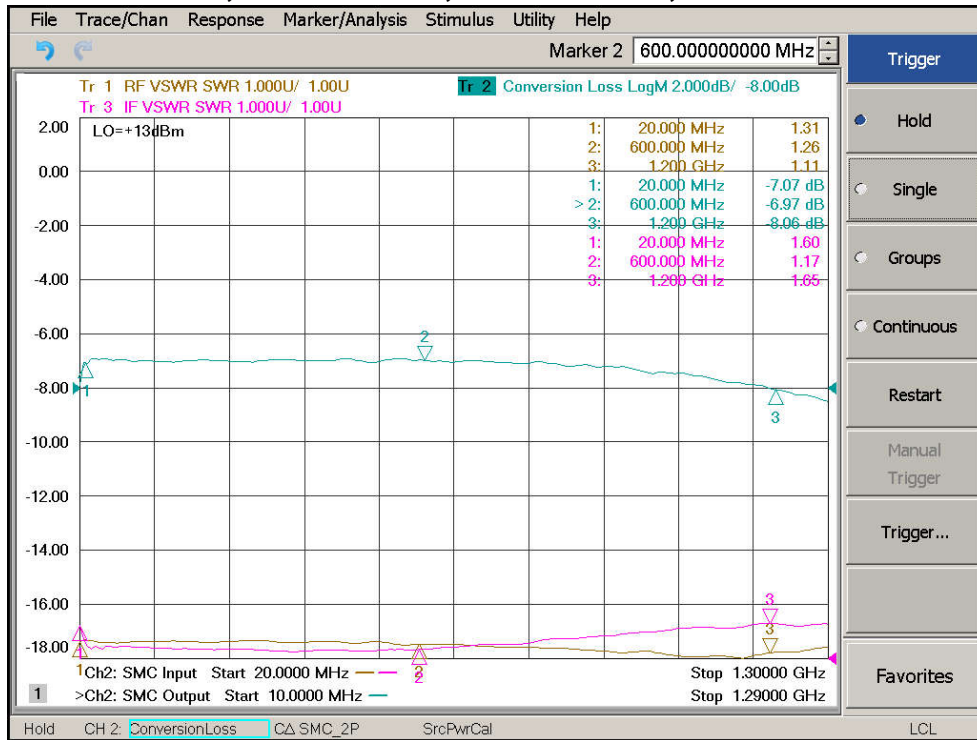
Conversion Loss, RF/IF VSWR, LO=+10dBm, IF=10MHz



Conversion Loss, RF/IF VSWR, LO=+16dBm, IF=10MHz



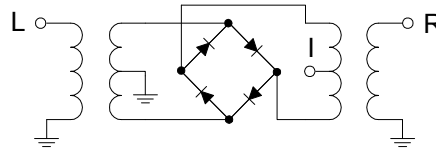
IF Bandwidth, RF/IF VSWR, LO=+13dBm, LO=10MHz



**Absolute Maximum Ratings**

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF Power              | +23dBm            |
| Peak IF Current       | 40mA              |
| Operating Temperature | -40 °C to +85 °C  |
| Storage Temperature   | -55 °C to +100 °C |

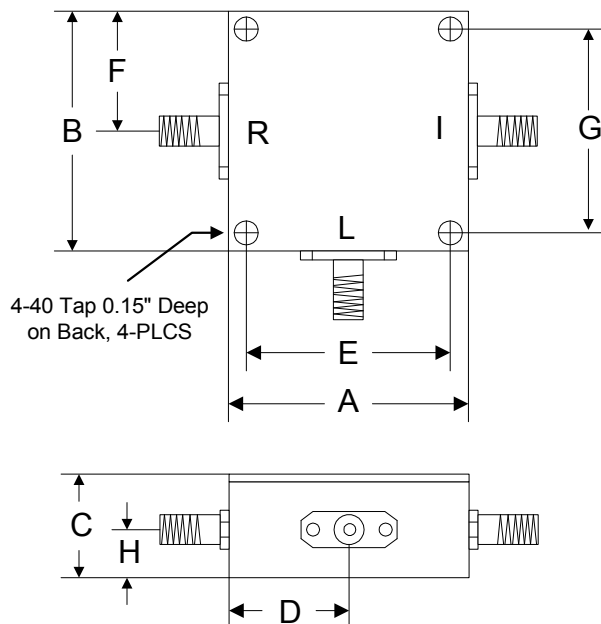
**Schematic**



**ESD Sensitive Material**



**Outline**



|      | A     | B     | C     | D     | E     | F     | G     | H     |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch | 1.250 | 1.250 | 0.563 | 0.625 | 1.000 | 0.625 | 1.000 | 0.250 |
| mm   | 31.75 | 31.75 | 14.29 | 15.88 | 25.40 | 15.88 | 25.40 | 6.35  |