



## DESCRIPTION

AMCOM's AM14026012XD-P4 is a passive double balanced mixer with 14 to 26GHz at RF/LO port and DC to 8GHz at IF port. The mixer operates with LO drive level +13dBm.



## FEATURES

- LO/RF: 14–26GHz
- IF: DC–8GHz
- LO Level: +13dBm
- Conversion Loss: 9dB typ.
- RF Input: Up to +14dBm
- Input IP3: +20dBm
- SMA Female All Ports

## APPLICATIONS

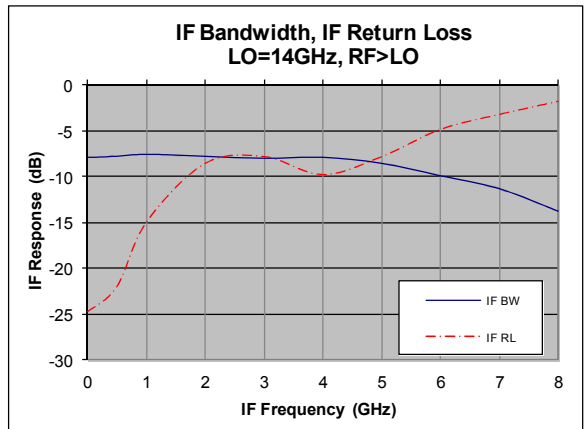
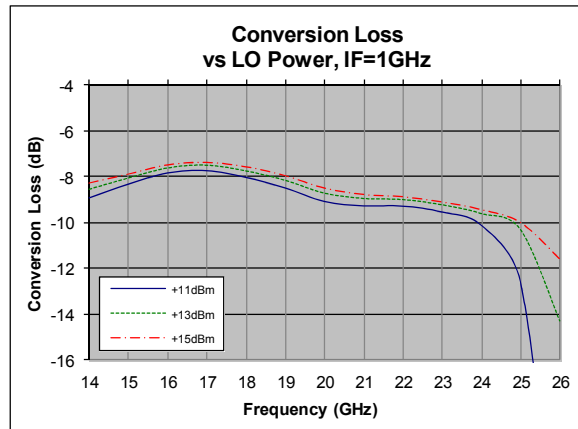
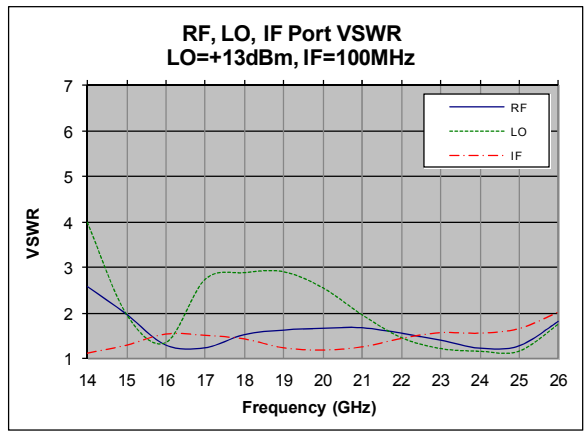
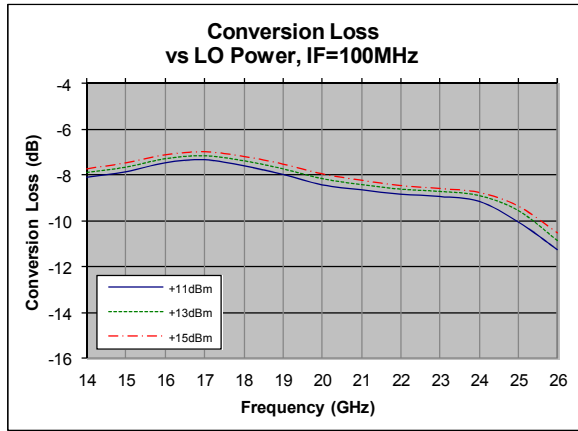
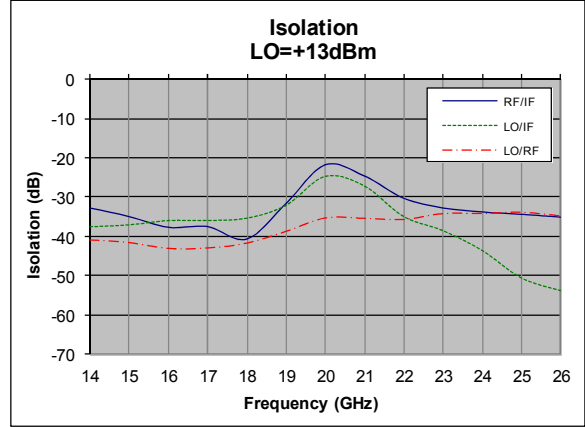
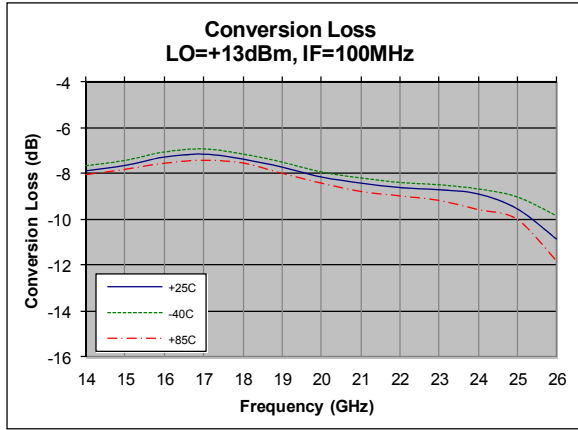
- Telecom Infrastructure
- Military & Aerospace
- VSAT
- Test & Instrumentation
- Radar
- Communication

## Electrical Specifications @ +25 °C, IF=100MHz, LO=+13dBm, 50 Ω

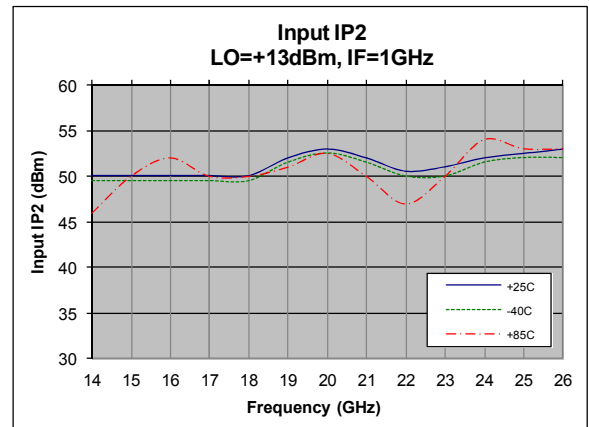
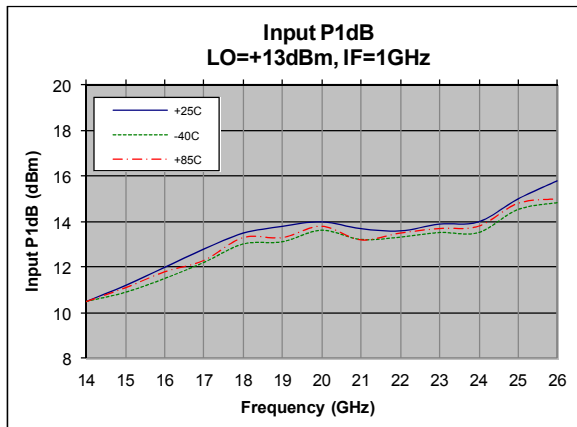
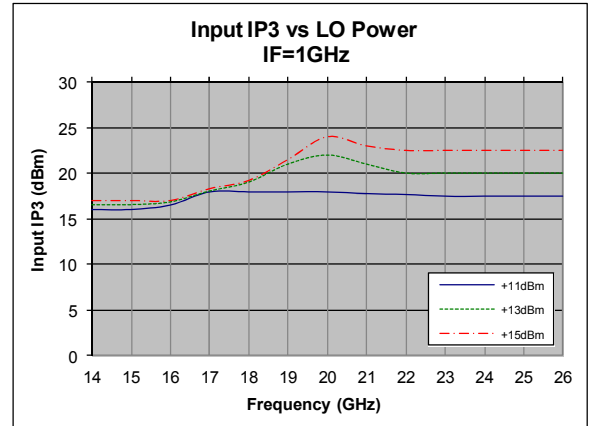
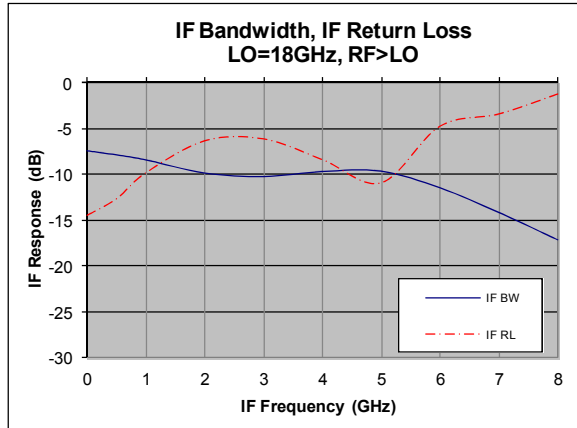
| Parameter                 | Unit            | Minimum | Typical | Maximum |
|---------------------------|-----------------|---------|---------|---------|
| Frequency Range           | LO/RF           | GHz     | 14      | 26      |
|                           | IF              | GHz     | DC      | 8       |
| Conversion Loss           | LO/RF: 14-18GHz | dB      | 8       | 11      |
|                           | LO/RF: 18-26GHz | dB      | 9       | 12      |
| LO-RF Isolation           | LO/RF: 14-18GHz | dB      | 34      | 40      |
|                           | LO/RF: 18-26GHz | dB      | 30      | 35      |
| LO-IF Isolation           | LO/RF: 14-18GHz | dB      | 24      | 30      |
|                           | LO/RF: 18-26GHz | dB      | 24      | 35      |
| RF-IF Isolation           | LO/RF: 14-18GHz | dB      | 15      | 25      |
|                           | LO/RF: 18-26GHz | dB      | 25      | 30      |
| RF Input P <sub>1dB</sub> | LO/RF: 14-18GHz | dBm     | +12     |         |
|                           | LO/RF: 18-26GHz | dBm     | +14     |         |
| Input IP3                 | LO/RF: 14-18GHz | dBm     | +18     |         |
|                           | LO/RF: 18-26GHz | dBm     | +20     |         |
| Input IP2                 | LO/RF: 14-18GHz | dBm     | +50     |         |

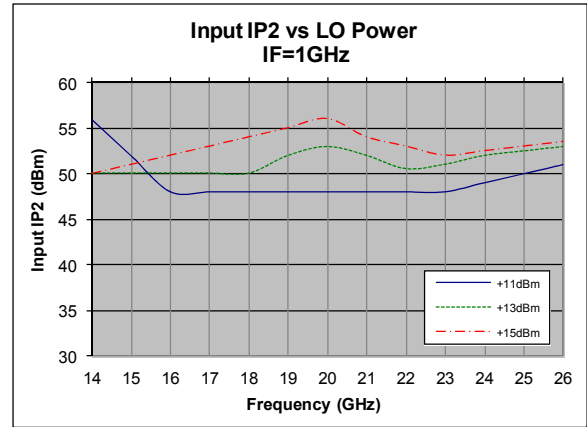
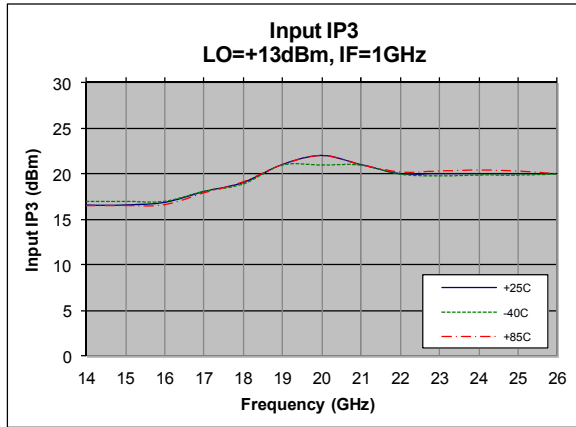
|                 |     |     |  |
|-----------------|-----|-----|--|
| LO/RF: 18-26GHz | dBm | +50 |  |
|-----------------|-----|-----|--|

Typical Performance



## Typical Performance

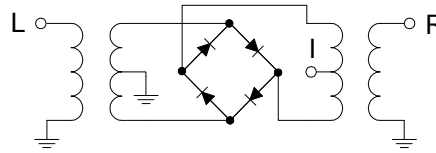




### Absolute Maximum Ratings

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF IF Power           | +15dBm            |
| LO Driver             | +27dBm            |
| Operating Temperature | -40 °C to +85 °C  |
| Storage Temperature   | -65 °C to +150 °C |

### Schematic



### Outline

