

## M-FMD10@Schottky diodes MMIC

Schottky fundamental mixer module

### Feature:

- LO Input Freq: 90GHz~110GHz
- LO Power: 5 mW
- RF Input Freq: 90GHz~110GHz
- RF Power:  $\leq 0.1\text{mW}$
- IF Output Frequency: 20GHz
- SSB Conversion Loss:  $\leq 9\text{dB}$ (Typical)
- Made in China
- MOQ: 2pcs
- Chip or Package module available

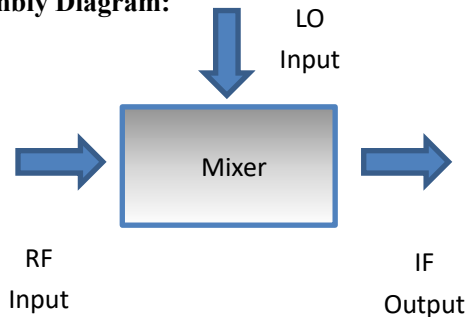
### Electrical Characteristics:

| Item                | Min  | Typ  | Max | Unit |
|---------------------|------|------|-----|------|
| Output Freq         | 0.01 | 10   | 20  | GHz  |
| Input Freq          | 90   | 100  | 110 | GHz  |
| RF Input Power      | —    | 0.01 | 8   | mW   |
| LO Input Power      | 3    | 8    | 13  | mW   |
| SSB Conversion Loss | 7    | 8    | 9   | dB   |

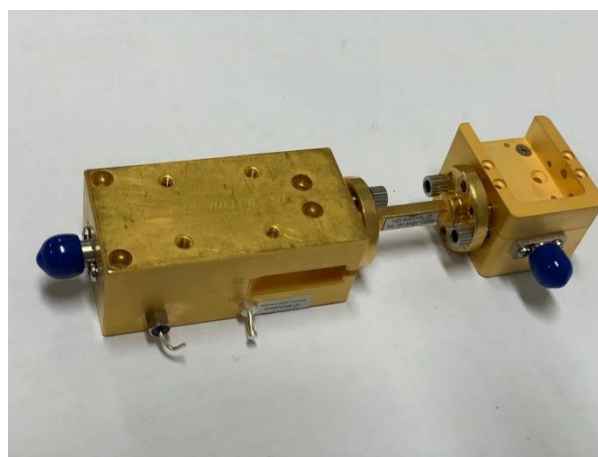
### Maximum Ratings:

|                |             |
|----------------|-------------|
| LO Input Power | 13dBm       |
| RF Input Power | 13dBm       |
| Storage Temp   | -60°C~150°C |
| Operating Temp | -30°C~85°C  |

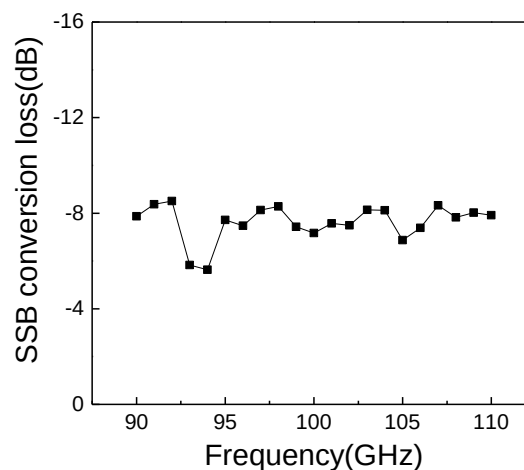
### Assembly Diagram:



Notes: Module size: 25mm\*24mm\*20mm



### Measured Performance:



**Tips:**

- 1) Storage: The chip must be placed in a container with static protection function and under nitrogen environment.
- 2) Cleaning treatment: Bare chips must be operated and used in a clean environment, which is prohibited Liquid cleaners clean the chips.
- 3) ESD handling precautions: Please strictly abide by ESD protection requirements to avoid electrostatic damage.
- 4) Routine operation: Use a vacuum chuck or precision pointed tweezers to take the chip. Avoid touching the chip surface with tools or fingers during the operation.
- 5) Power-up sequence: When powering up, first add the grid voltage and then the leakage voltage; when powering down, go first Leakage voltage, then remove the gate voltage.
- 6) Please contact us by [sales@teraradar.com](mailto:sales@teraradar.com) if any questions.