

10 GHz 3<sup>rd</sup> channel option for HP 53131A, HP 53132A and HP 53181A.

## PRELIMINARY DATASHEET

this is not the final version of the datasheet and the information presented here is bound to change.

### Features

- 0.1 to 10 GHz operation window.
- High sensitivity.
- Input protection (27 dBm max).
- AC coupled (max 35 V to GND).

### Description

The Cojotech HPO-100 is a replacement kit for the original 3<sup>rd</sup> channel option, for the HP/Agilent 53131A, 53132A and 53181A, which have been discontinued.

This option adds 0.1 to 10 GHz counting ability to counters which were not fitted with a 3<sup>rd</sup> channel option from the factory, or had the original 3 GHz option installed.

Please check the [selection guide](#) to decide which option is right for you.

### Package contents

- HPO-100 board.
- High quality SMA connector ([SMA-BBLK-2](#)).
- IDC cable.
- Mounting screws.

### Warranty

This product benefits from a 2-year warranty against defects in materials and workmanship.

# Absolute Maximums

| Parameter   | Ratings |
|-------------|---------|
| Input Power | 27 dBm  |
| DC Voltage  | ± 35 V  |

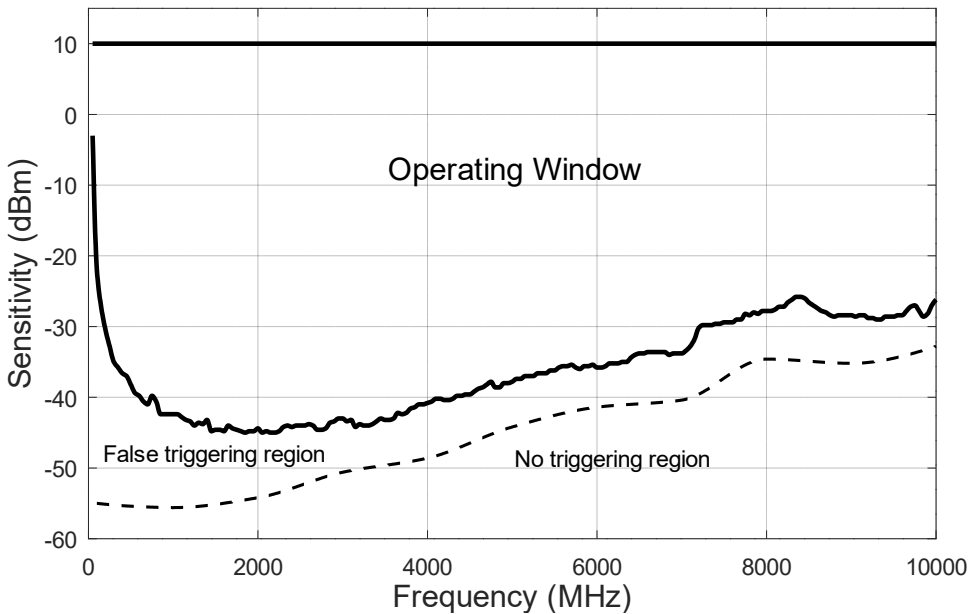
# Sensitivity

The required amplitude for a reading with an accuracy of 0.1 ppm.

Correct operation tested up to +10 dBm, limited by signal generator.

| Frequency (MHz) | Typical (dBm) | Worst (dBm) |
|-----------------|---------------|-------------|
| 100             | -22           | -19         |
| 200             | -30           | -28         |
| 500             | -38           | -35         |
| 1,000           | -42           | -39         |
| 2,000           | -44           | -41         |
| 3,000           | -43           | -39         |
| 4,000           | -40           | -38         |
| 5,000           | -37           | -35         |
| 6,000           | -35           | -33         |
| 7,000           | -33           | -30         |
| 8,000           | -27           | -24         |
| 9,000           | -28           | -26         |
| 10,000          | -26           | -23         |

**Sensitivity vs Frequency**



# Mechanical properties

## SMA ([SMA-BBLK-2](#))

| Description | Material         | Finish      |
|-------------|------------------|-------------|
| Jacket      | Stainless steel  |             |
| Body        | Stainless steel  |             |
| Contact     | Beryllium copper | Gold plated |
| Dielectric  | PTFE             |             |

## N-type (option E)

| Description | Material         | Finish        |
|-------------|------------------|---------------|
| Body        | Brass            | Nickel plated |
| Contact     | Beryllium copper | Gold plated   |
| Dielectric  | PTFE             |               |

### Notes:

- 1). Unless otherwise stated, all specifications are nominal.
- 2). The information contained in this document is accurate to the best of our knowledge. We reserve the right to update it, with new information or corrections, without notice.