

# CPINU5208-HF

RoHS Device  
Halogen Free

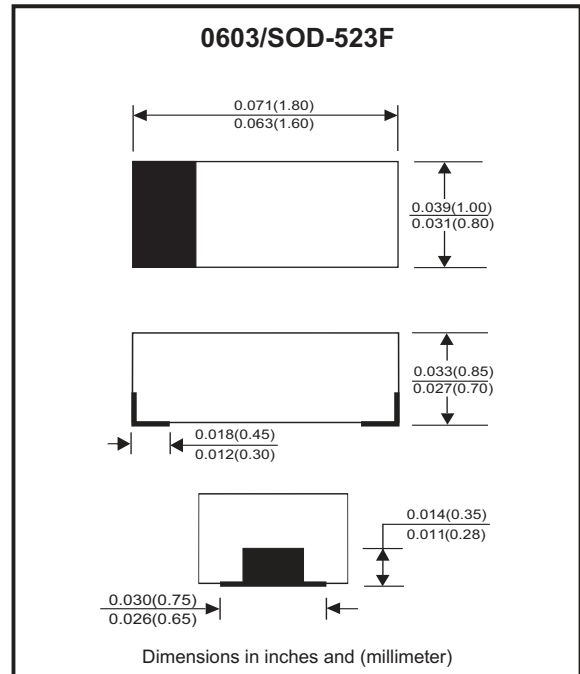


## Features

- Suitable for Antenna Switches in Portable Two-way Radios.
- Very Low Series Resistance.
- Low Capacitance.

## Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.003 grams(approx.).



## Circuit Diagram



## Maximum Rating (at TA=25°C unless otherwise noted)

| Parameter                  | Symbol | Rating   | Unit |
|----------------------------|--------|----------|------|
| Reverse Voltage            | VR     | 35       | V    |
| Power Dissipation (Note 1) | PD     | 300      | mW   |
| Junction Temperature       | TJ     | 150      | °C   |
| Storage Temperature Range  | TSTG   | -55~+150 | °C   |

Note: 1. Mounting on glass epoxy PCB (50mm x 50mm x 1.6mm).

## Electrical Characteristics (at TA=25°C unless otherwise noted)

| Parameter                 | Conditions             | Symbol | Min | Typ  | Max  | Unit |
|---------------------------|------------------------|--------|-----|------|------|------|
| Reverse Current           | VR = 35V               | IR     | -   | -    | 10   | μA   |
| Reverse Current           | VR = 25V               | IR     | -   | -    | 100  | nA   |
| Forward Voltage           | IF = 10mA              | VF     | -   | -    | 1.0  | V    |
| Diode Capacitance         | VR = 20V , f = 100MHz  | CT     | -   | -    | 0.9  | pF   |
| Forward Series Resistance | IF = 10mA , f = 100MHz | Rfs    | -   | 0.45 | 0.70 | Ω    |

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

## TYPICAL RATING AND CHARACTERISTIC CURVES (CPINU5208-HF)

Fig.1 - Forward Current VS. Forward Voltage

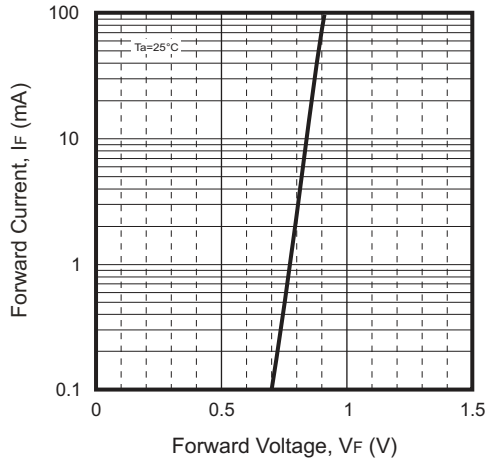


Fig.2 - Reverse Current VS. Reverse Voltage

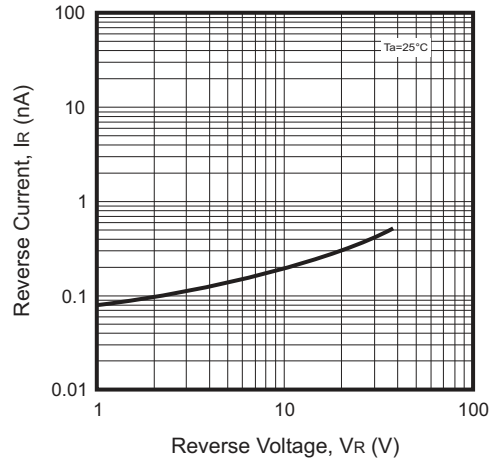


Fig.3 - Forward Series Resistance VS. Forward Current

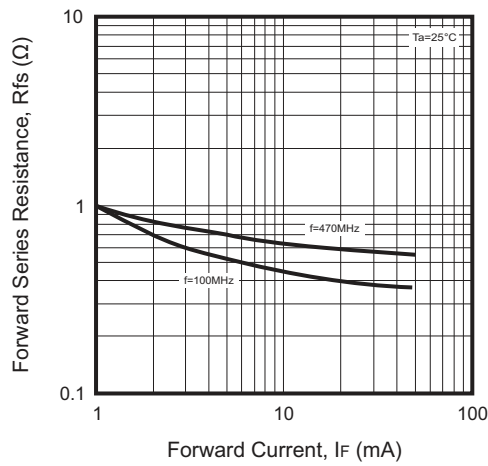
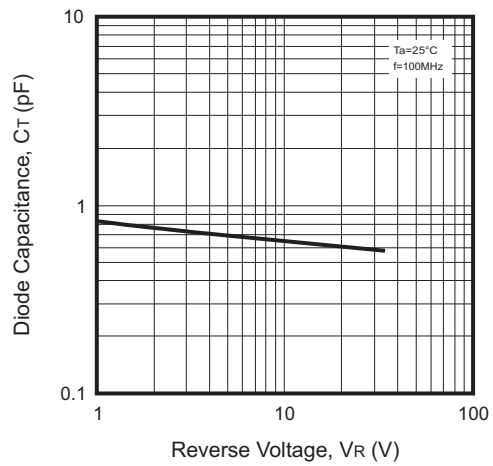
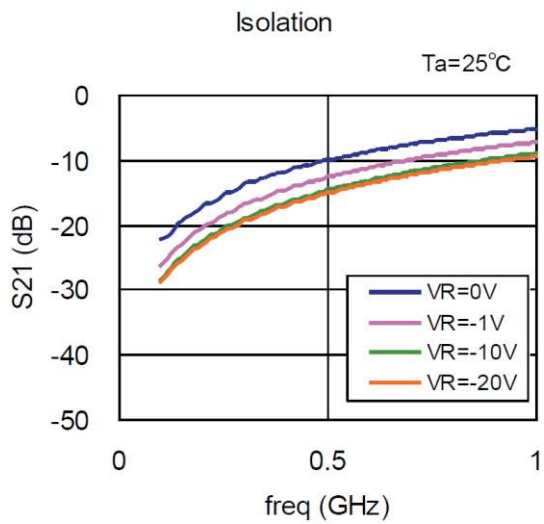
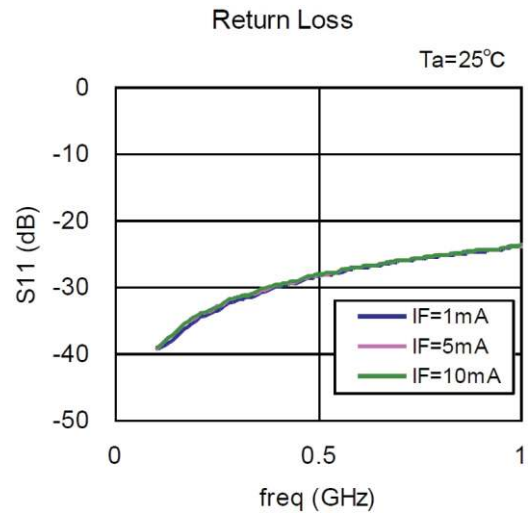
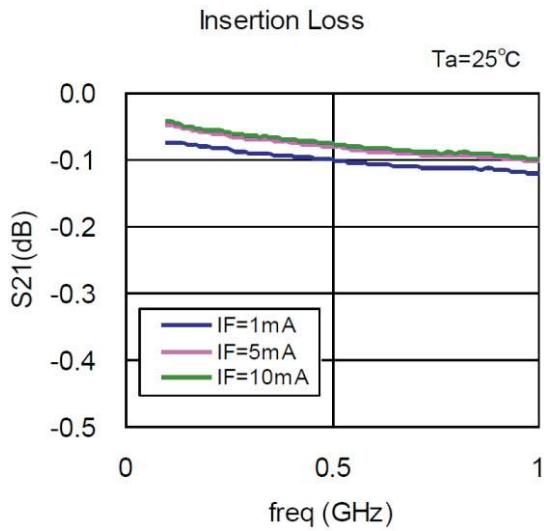


Fig.4 - Diode Capacitance VS. Reverse Voltage

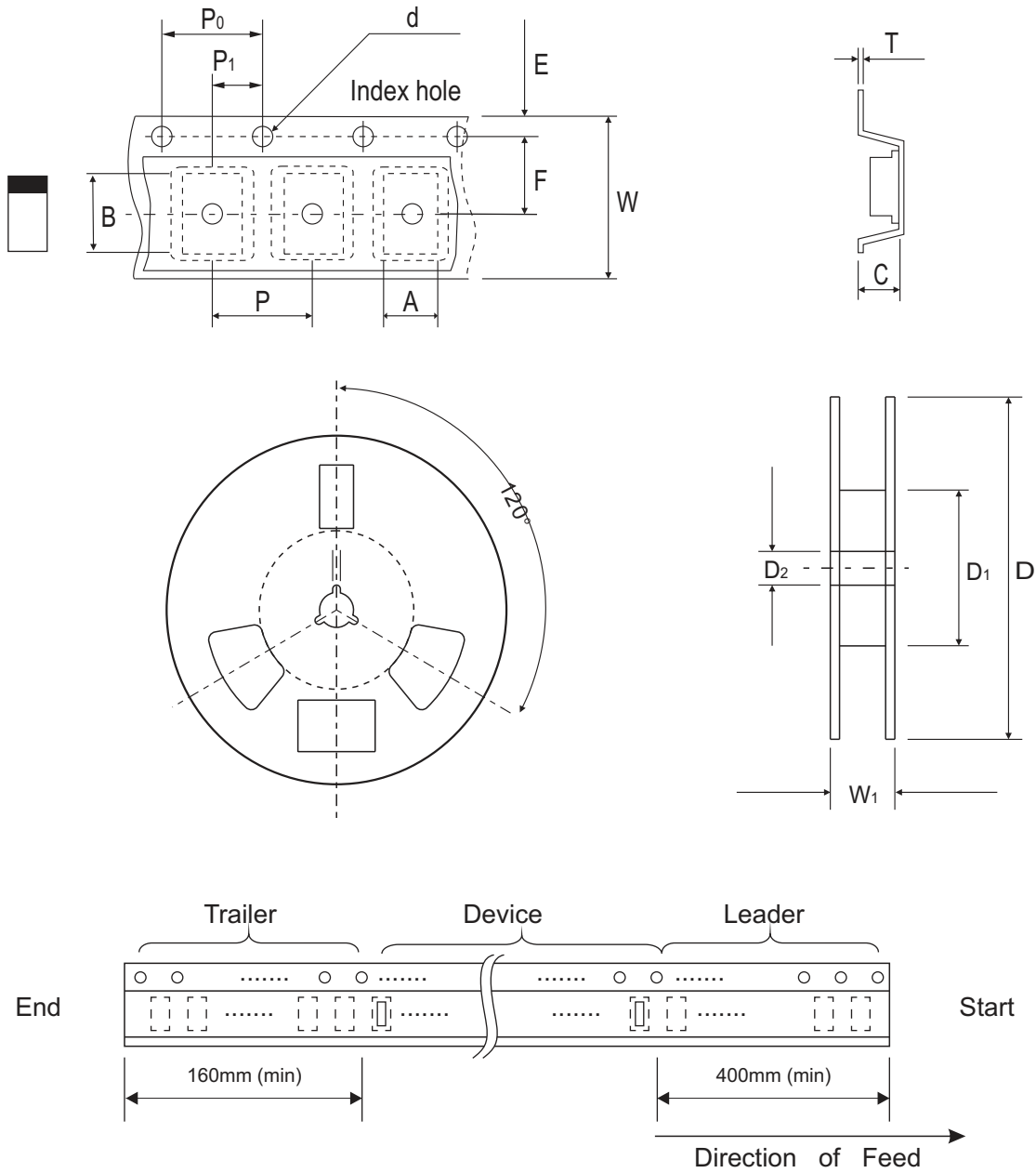


## TYPICAL RATING AND CHARACTERISTIC CURVES (CPINU5208-HF)



Note: Series configuration. Zo=50Ω  
Losses of test fixtures are excluded from the measuring data.

## Reel Taping Specification



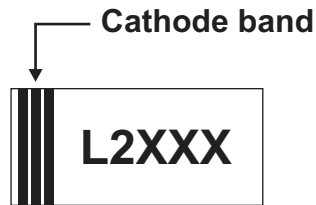
| 0603<br>(SOD-523F) | SYMBOL | A             | B             | C             | d                    | D             | D <sub>1</sub> | D <sub>2</sub> |
|--------------------|--------|---------------|---------------|---------------|----------------------|---------------|----------------|----------------|
|                    | (mm)   | 1.16 ± 0.10   | 1.90 ± 0.10   | 0.95 ± 0.10   | 1.50 + 0.10<br>- 0   | 178.00 ± 1.00 | 60.00 ± 0.50   | 13.50 ± 0.20   |
|                    | (inch) | 0.046 ± 0.004 | 0.075 ± 0.004 | 0.037 ± 0.004 | 0.059 + 0.004<br>- 0 | 7.008 ± 0.039 | 2.362 ± 0.020  | 0.531 ± 0.008  |

| 0603<br>(SOD-523F) | SYMBOL | E             | F             | P             | P <sub>0</sub> | P <sub>1</sub> | T                        | W             | W <sub>1</sub>       |
|--------------------|--------|---------------|---------------|---------------|----------------|----------------|--------------------------|---------------|----------------------|
|                    | (mm)   | 1.75 ± 0.10   | 3.50 ± 0.05   | 4.00 ± 0.10   | 4.00 ± 0.10    | 2.00 ± 0.05    | 0.22 + 0.10<br>- 0.05    | 8.00 ± 0.20   | 12.00 + 0.50<br>- 0  |
|                    | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004  | 0.079 ± 0.002  | 0.009 + 0.004<br>- 0.002 | 0.315 ± 0.008 | 0.472 + 0.020<br>- 0 |

Company reserves the right to improve product design, functions and reliability without notice.

## Marking Code

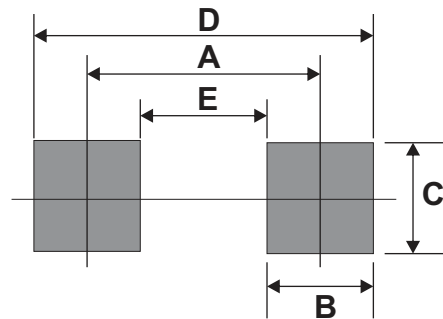
| Part Number  | Marking Code |
|--------------|--------------|
| CPINU5208-HF | L2XXX        |



XXX = Lot code (3~4 digits)

## Suggested PAD Layout

| SIZE | 0603/SOD-523F |        |
|------|---------------|--------|
|      | (mm)          | (inch) |
| A    | 1.70          | 0.067  |
| B    | 0.60          | 0.024  |
| C    | 0.80          | 0.031  |
| D    | 2.30          | 0.091  |
| E    | 1.10          | 0.043  |



## Standard Packaging

| Case Type      | REEL PACK    |                  |
|----------------|--------------|------------------|
|                | REEL ( pcs ) | Reel Size (inch) |
| 0603/ SOD-523F | 4,000        | 7                |