

CPINF5204-HF

RoHS Device
Halogen Free

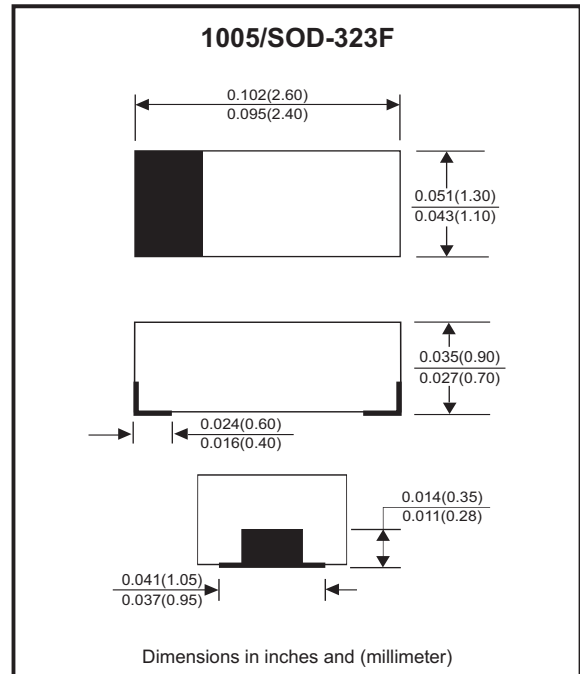


Features

- High Power Handling for VHF/UHF band.
- Low Capacitance at Zero Bias, Extremely Small Reverse Bias.
- Low Series Resistance.
- Very Low Insertion Loss, High Isolation.

Mechanical data

- Case: 1005/SOD-323F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.006 grams(approx.).



Circuit Diagram



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

| Parameter | Symbol | Rating | Unit |
|----------------------------|------------------|----------|------|
| Reverse Voltage | V _R | 180 | V |
| Power Dissipation (Note 1) | P _D | 500 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature Range | T _{STG} | -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 | V _R = 180V | I _R | - | - | 10 | μA |
| Forward Voltage | I _F = 100mA | V _F | - | - | 1.0 | V |
| Diode Capacitance | V _R = 40V, f = 100MHz | C _T | - | - | 0.9 | pF |
| Forward Series Resistance | I _F = 50mA, f = 100MHz | R _{fs} | - | 0.5 | 0.75 | Ω |

TYPICAL RATING AND CHARACTERISTIC CURVES (CPINF5204-HF)

Fig.1 - Forward Current VS. Forward Voltage

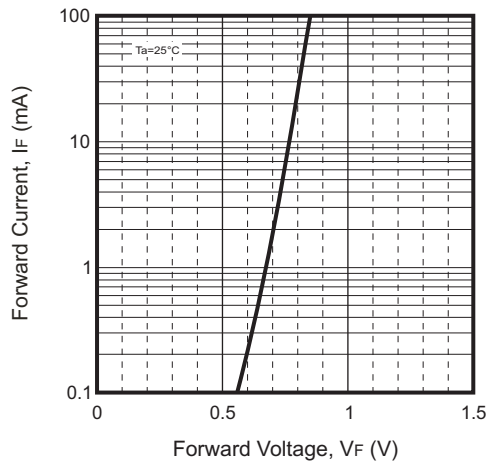


Fig.2 - Reverse Current VS. Reverse Voltage

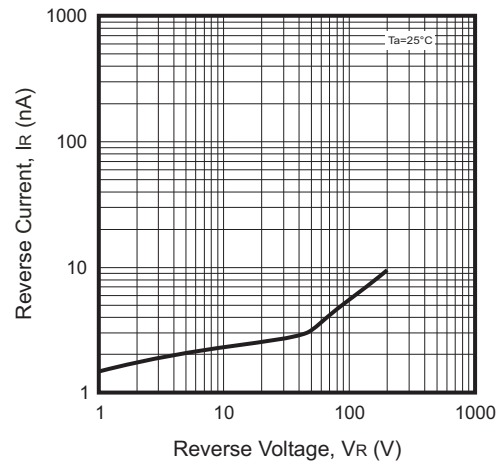


Fig.3 - Forward Series Resistance VS. Forward Current

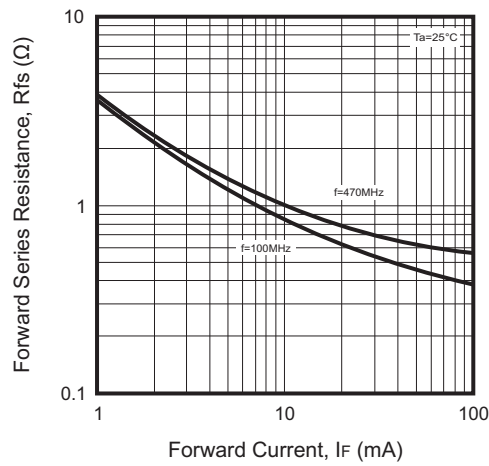
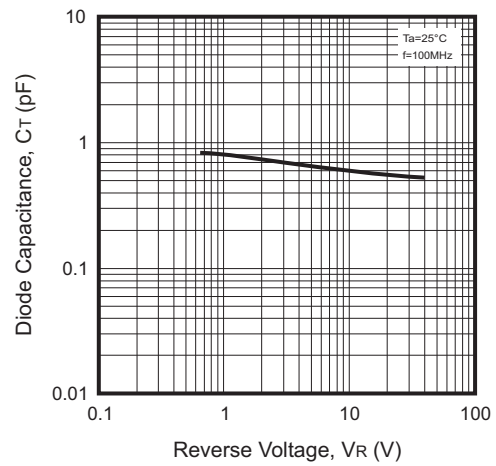
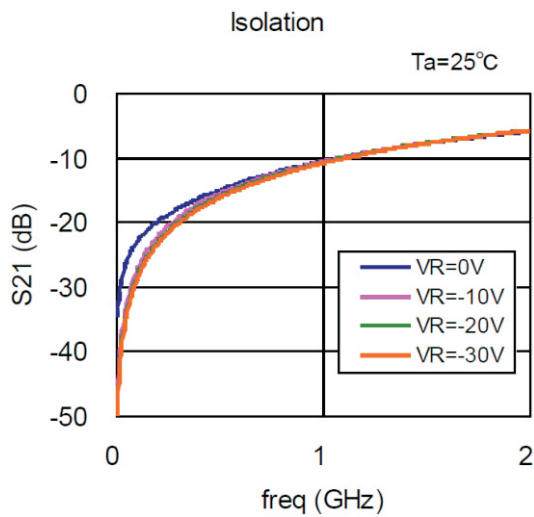
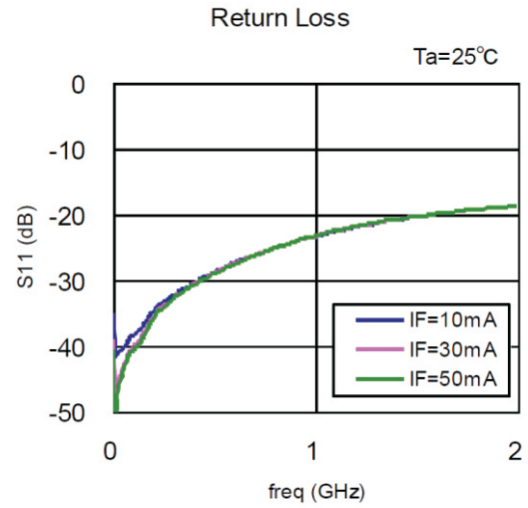
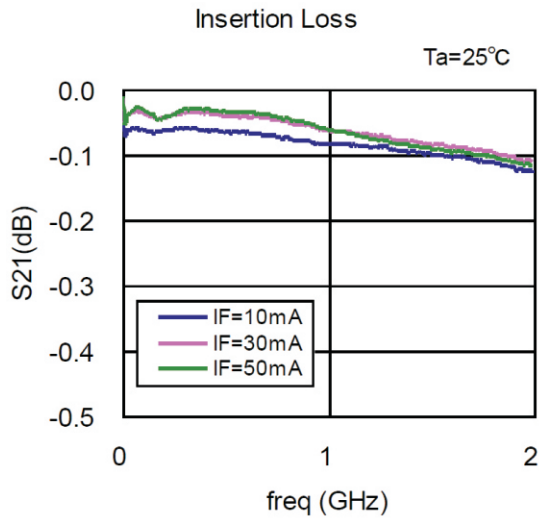


Fig.4 - Diode Capacitance VS. Reverse Voltage

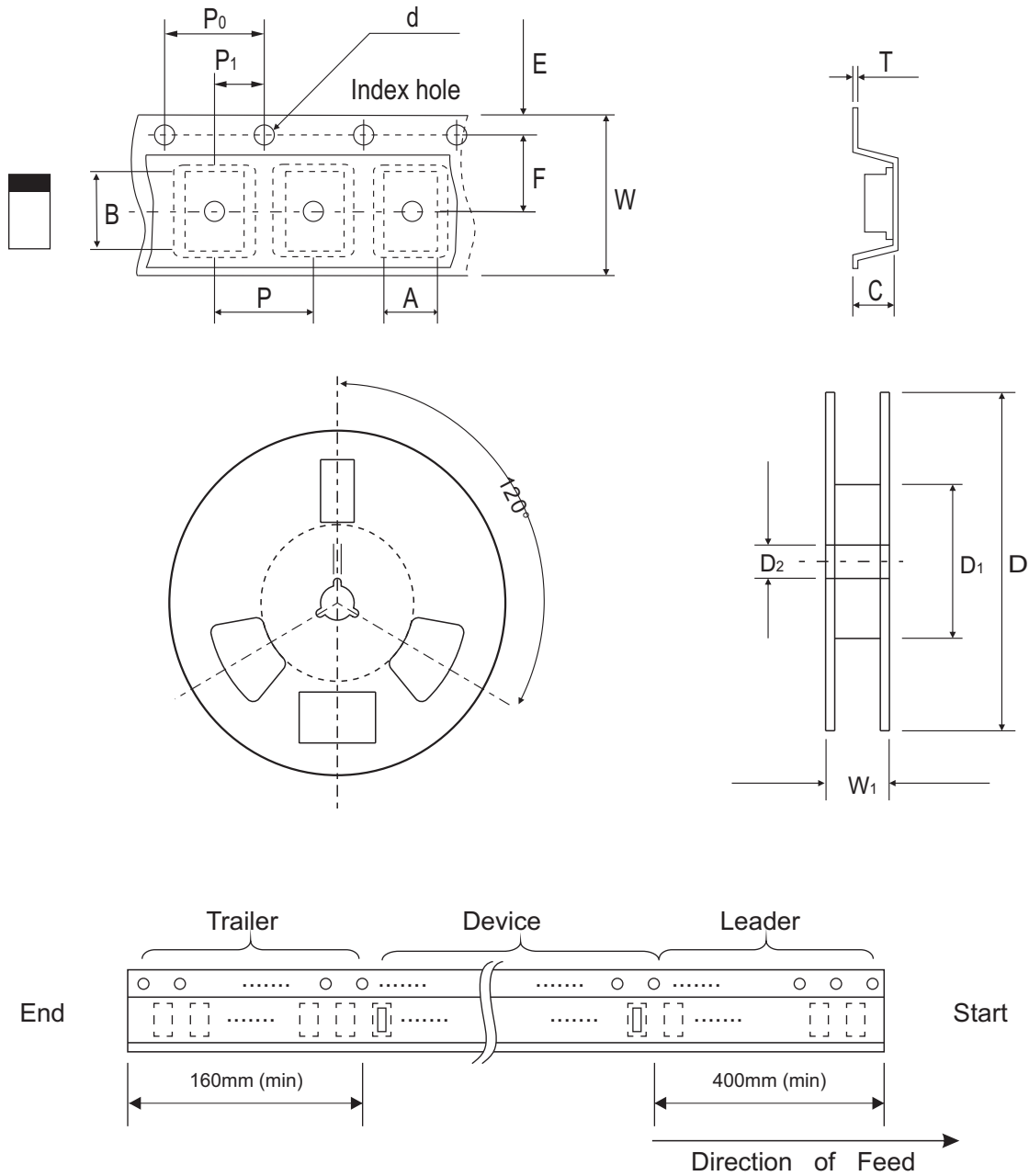


TYPICAL RATING AND CHARACTERISTIC CURVES (CPINF5204-HF)



Note: Series configuration. $Z_0=50\Omega$
 Losses of test fixtures are excluded from the measuring data.

Reel Taping Specification



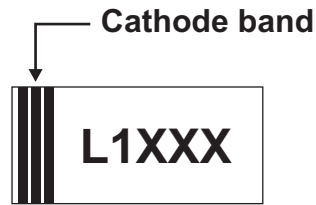
| 1005 (SOD-323F) | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|--------------------|--------|---------------|---------------|---------------|----------------------|---------------|----------------|----------------|
| | (mm) | 1.45 ± 0.05 | 2.80 ± 0.05 | 1.00 ± 0.05 | 1.50 + 0.10 - 0 | 178.00 ± 1.00 | 60.00 ± 0.50 | 13.50 ± 0.20 |
| | (inch) | 0.057 ± 0.002 | 0.110 ± 0.002 | 0.039 ± 0.002 | 0.059 + 0.004 - 0 | 7.008 ± 0.039 | 2.362 ± 0.020 | 0.531 ± 0.008 |

| 1005 (SOD-323F) | SYMBOL | E | F | P | P ₀ | P ₁ | T | W | W ₁ |
|--------------------|--------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 0.23 ± 0.05 | 8.00 ± 0.10 | 12.00 + 0.50 - 0 |
| | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.009 ± 0.002 | 0.315 ± 0.004 | 0.472 + 0.020 - 0 |

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

Marking Code

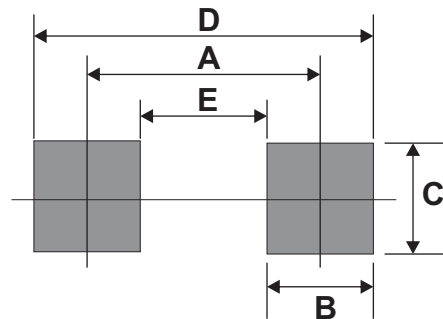
| Part Number | Marking Code |
|--------------|--------------|
| CPINF5204-HF | L1XXX |



XXX = Lot code (3~4 digits)

Suggested PAD Layout

| SIZE | 1005/SOD-323F | |
|------|---------------|--------|
| | (mm) | (inch) |
| A | 2.10 | 0.083 |
| B | 1.20 | 0.047 |
| C | 1.20 | 0.047 |
| D | 3.30 | 0.130 |
| E | 0.90 | 0.035 |



Standard Packaging

| Case Type | REEL PACK | |
|----------------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| 1005/ SOD-323F | 4,000 | 7 |