

HVL397CM

Variable Capacitance Diode for VCO

REJ03G0014-0100Z

Rev.1.00

Apr.25.2003

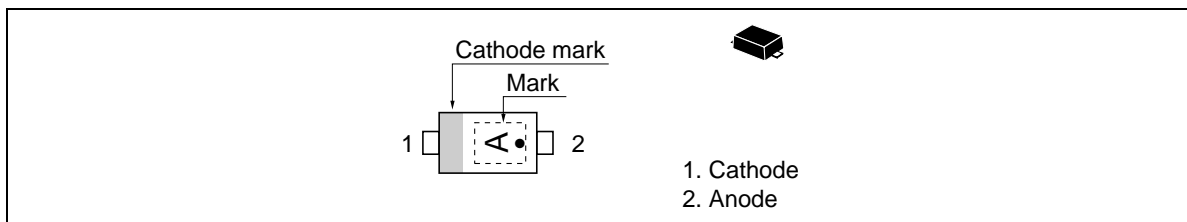
Features

- High capacitance ratio. (n = 2.9 min)
- Thin Extremely small Flat Package (TEFP) is suitable for surface mount design.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVL397CM | A | TEFP |

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|----------------------|-----------|-------------|------|
| Reverse voltage | V_R | 15 | V |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

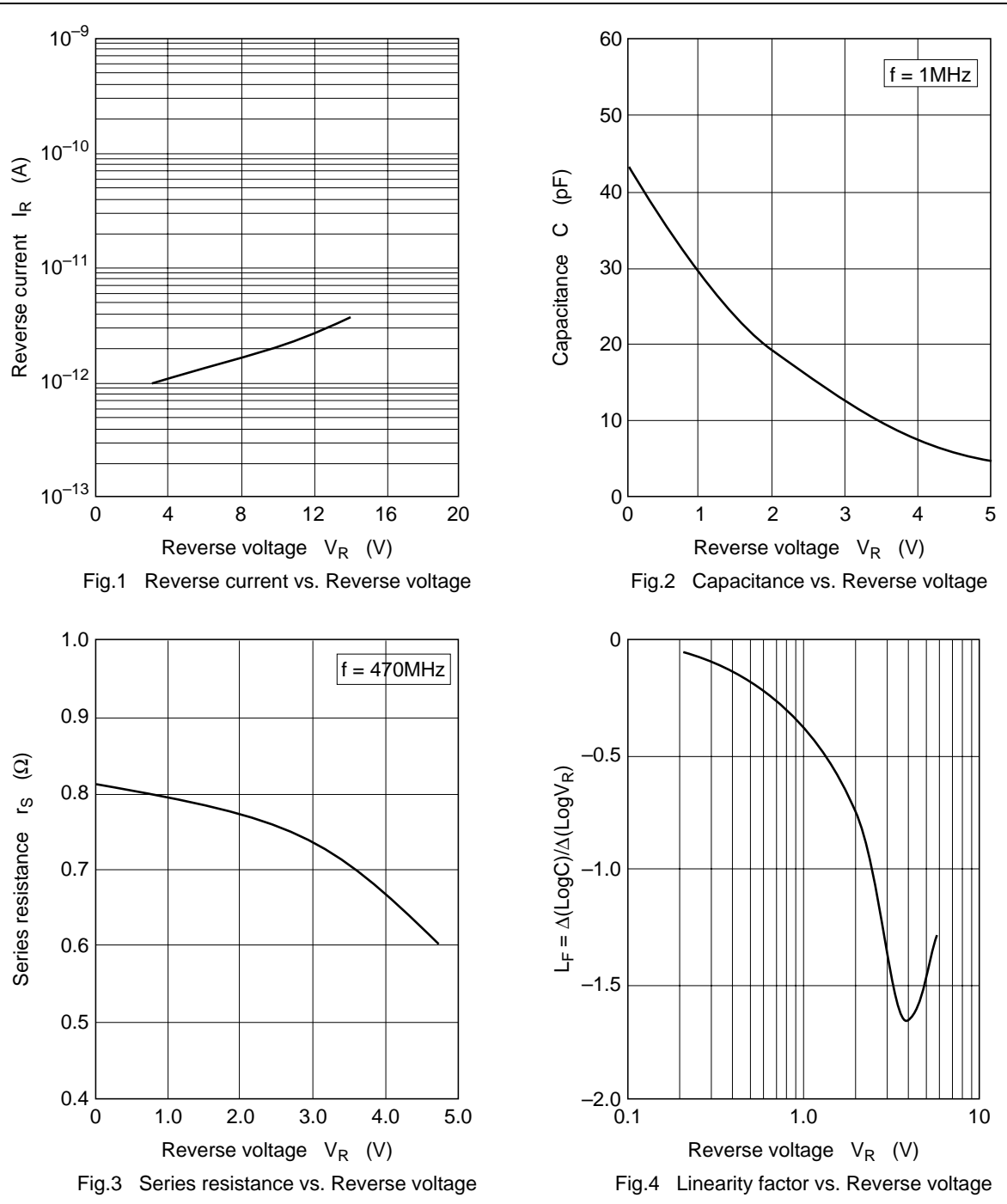
Electrical Characteristics

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------|----------|------|-----|------|----------|---------------------------------------------|
| Reverse current | I_{R1} | — | — | 10 | nA | $V_R = 10\text{ V}$ |
| | I_{R2} | — | — | 50 | | $V_R = 10\text{ V}, T_a = 60^\circ\text{C}$ |
| Capacitance | C_1 | 27.0 | — | 28.5 | pF | $V_R = 1\text{ V}, f = 1\text{ MHz}$ |
| | C_2 | 18.0 | — | 20.0 | | $V_R = 2\text{ V}, f = 1\text{ MHz}$ |
| | C_4 | 6.80 | — | 8.50 | | $V_R = 4\text{ V}, f = 1\text{ MHz}$ |
| Capacitance ratio | n_1 | 1.3 | — | — | — | C_1 / C_2 |
| | n_2 | 2.9 | — | — | — | C_1 / C_4 |
| Series resistance | r_s | — | — | 1.2 | Ω | $V_R = 1\text{ V}, f = 470\text{ MHz}$ |

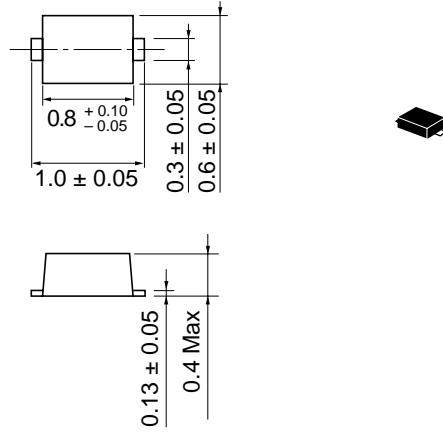
- Notes: 1. Please do not use the soldering iron due to avoid high stress to the TAFP package.
 2. The material of lead is exposed for cutting plane. Therefore, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic



Package Dimensions

As of January, 2003
Unit: mm



| | |
|------------------------|----------|
| Package Code | TEFP |
| JEDEC | — |
| JEITA | — |
| Mass (reference value) | 0.0006 g |

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