

HVL355CM

Variable Capacitance Diode for VCO

REJ03G0012-0200Z
Rev.2.00
Jun.07.2004

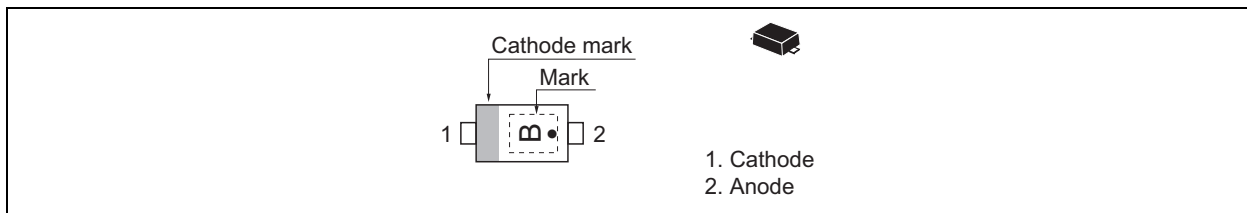
Features

- High capacitance ratio. ($n = 2.35$ min)
- Low series resistance. ($r_s = 0.60 \Omega$ max)
- Thin Extremely small Flat Package (TEFP) is suitable for surface mount design.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVL355CM | B | 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 = 15 V |
| | I _{R2} | — | — | 100 | | V _R = 15 V, Ta = 60°C |
| Capacitance | C ₁ | 6.62 | — | 7.02 | pF | V _R = 1 V, f = 1 MHz |
| | C ₄ | 2.60 | — | 2.95 | | V _R = 4 V, f = 1 MHz |
| Capacitance ratio | n | 2.35 | — | 2.55 | — | C ₁ / C ₄ |
| Series resistance | r _s | — | — | 0.60 | Ω | V _R = 1 V, f = 470 MHz |

Notes: 1. Please do not use the soldering iron due to avoid high stress to the TEFP package.

2. The material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic

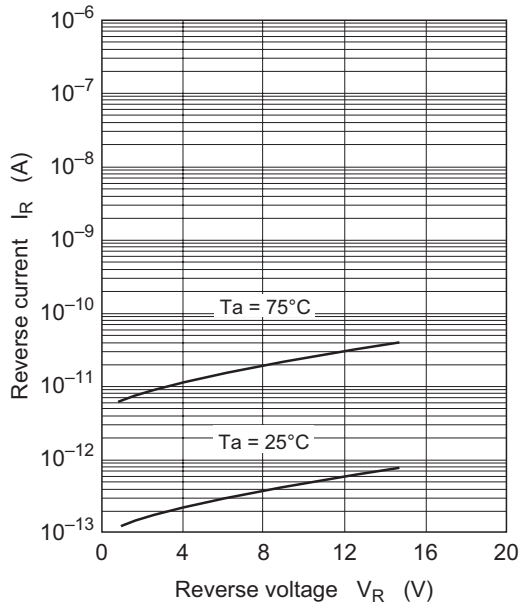


Fig.1 Reverse current vs. Reverse voltage

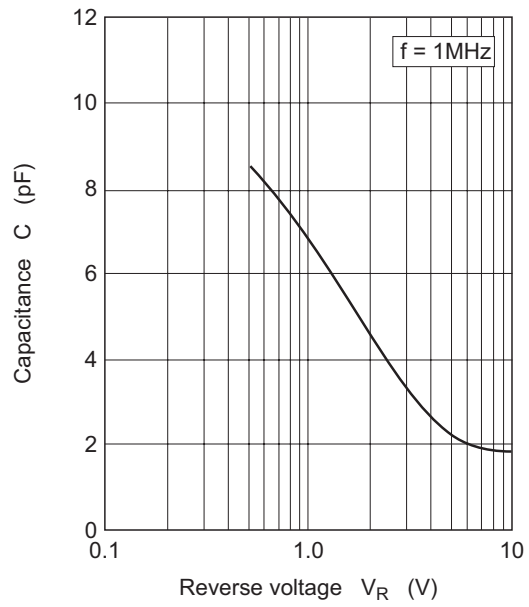


Fig.2 Capacitance vs. Reverse voltage

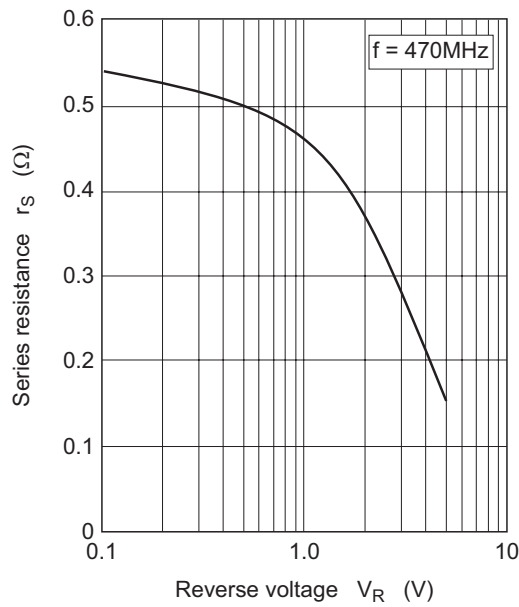


Fig.3 Series resistance vs. Reverse voltage

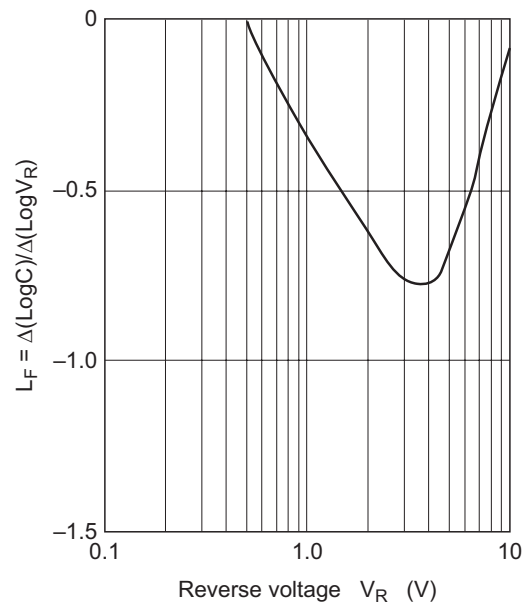
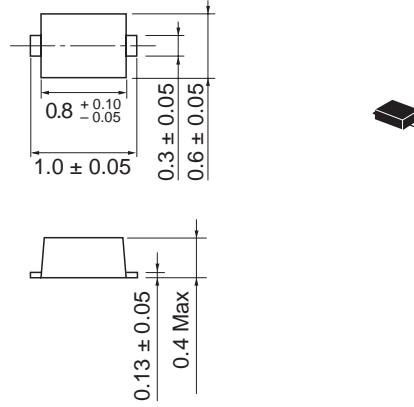


Fig.4 L_F vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



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

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