

## FEATURES

- 2.5V Operation
- High Performance
- Complementary Output

## Applications Include

- SONET
- ATM
- SDH
- WAN



**Discontinued**

## PRELIMINARY

### • PART NUMBER SELECTION

| Part Number         | Model Number | APR     | Operating Temperature | Frequency Range (MHz) |
|---------------------|--------------|---------|-----------------------|-----------------------|
| 681-Frequency-xxxxx | RFV250       | ±50 PPM | -40 ~ +85 °C          | 600.000 ~ 1250        |

### • ELECTRICAL CHARACTERISTICS

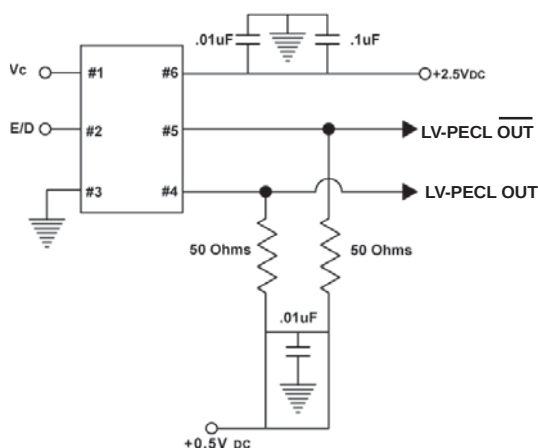
| PARAMETERS                              | MAX (unless otherwise noted) |
|-----------------------------------------|------------------------------|
| Frequency Range (Fo)                    | 600.000 ~ 1250MHz            |
| Absolute Pull Range (APR) Vc=1.25V±1.0V | ±50 PPM                      |
| Temperature Range                       |                              |
| Operating (TOPR)                        | -40°C ~ +85°C                |
| Storage (TSTG)                          | -55°C ~ +125°C               |
| Input Voltage (VDD)                     | 2.5V ± 5%                    |
| Control Voltage (Vc)                    | 1.25V ± 1.0V                 |
| Input Current (IDD)                     | 32mA                         |
| Rise Time (20% ~ 80% Vp-p)              | 0.5nS                        |
| Fall Time (80% ~ 20% Vp-p)              | 0.5nS                        |
| Symmetry (50% Vp-p)                     | 45/55 %                      |
| Output Voltage (VOL)                    | 0.9 V                        |
| (VOH)                                   | 1.3 V Min                    |
| Linearity                               | ± 10%                        |
| Modulation Bandwidth                    | >10kHz                       |
| PECL Skew (50% Vp-p)                    | 125pS                        |
| Jitter                                  |                              |
| RMS 12kHz to 20MHz                      | 0.3pS Typ.                   |
| RMS 50kHz to 80MHz                      | 0.8pS Typ.                   |
| RMS Period                              | 2.6pS Typ.                   |
| Cycle-to-Cycle                          | 19pS Typ.                    |
| Output Disable Time                     | 100nS Max                    |
| Output Enable Time                      | 100nS Max                    |

<sup>1</sup> Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

<sup>2</sup> An internal pullup resistor from pin 2 to pin 6 allows active output if pin 2 is left open

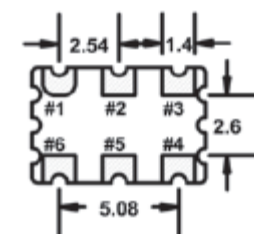
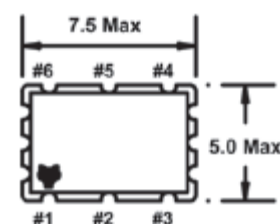
All specifications subject to change without notice. Rev. 6/1/04

RFV250 Series Recommended Circuit

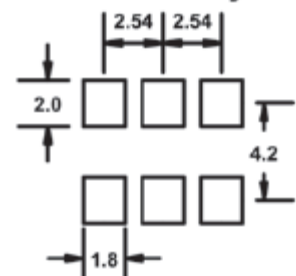


Learn more about:  
[Part Marking Identification](#)  
[Tape and Reel Specification](#)

Internet required



Recommended Solder Pad Layout



Pin Connections

|        |             |
|--------|-------------|
| #1 Vc  | #4 Output 1 |
| #2 E/D | #5 Output 2 |
| #3 GND | #6 VDD      |

All dimensions are in millimeters.

### • ENABLE / DISABLE FUNCTION

| (Pin 2)                          | OUTPUT (Pin 4, Pin 5) |
|----------------------------------|-----------------------|
| OPEN <sup>2</sup>                | ACTIVE                |
| '1' Level V <sub>IH</sub> ≥ 2.0V | ACTIVE                |
| '0' Level V <sub>IL</sub> ≤ 1.0V | High Z                |