

JRC SAW MODULE

ENVS101

Application

622.0800MHz or 666.5143MHz SONET/SDH
(155.5200MHz or 166.6286MHz)

Electrical Specification: (Table 1)

Table 1. Electrical Specifications

| Item | Minimum | Typical | Maximum | Unit |
|--|-----------|---------|----------|------|
| Supply Voltage(Vcc) | 3.135 | 3.3 | 3.465 | V |
| Supply Current(Icc) | | 90 | 110 | mA |
| LVPECL Specification | | | | |
| Input High Voltage(VI_PH) | Vcc-1.16 | | Vcc-0.88 | V |
| Input Low Voltage(VI_PL) | Vcc-1.81 | | Vcc-1.48 | V |
| Output High Voltage(VO_PH) | Vcc-1.03 | | Vcc-0.88 | V |
| Output Low Voltage(VO_PL) | Vcc-1.81 | | Vcc-1.62 | V |
| LVTTTL Specification | | | | |
| Input High Voltage(VI_TH) | 2.3 | | | V |
| Input Low Voltage(VI_TL) | | | 0.5 | V |
| Output High Voltage(VO_TH) | 2.4 | | | V |
| Output Low Voltage(VO_TL) | | | 0.4 | V |
| AC Specification | | | | |
| Rise/Fall Time (20% to 80%,622.08MHz) | | 300 | 400 | ps |
| Jitter Generation , rms (12kHz to 20MHz) | | 0.2 | 1.0 | ps |
| Jitter Transfer | | | | |
| Input Frequency Tracking Range(APR) | ± 100 | | | ppm |

Maximum Rating: (Table 2)

Table 2. Maximum Ratings

| Parameter | Rating | Unit |
|----------------------------------|-------------|------|
| Power Supply | -0.5 to 4.5 | V |
| Supply Current | 120 | mA |
| Differential Input Voltage Swing | 0.3 to 1.9 | Vp-p |
| TTL Input Voltage | -0.5 to 4.5 | V |
| Operating Temperature Range | 0~+75 | °C |
| Storage Temperature | -40~+85 | °C |

Mechanical Specifications: (Fig1)

Package is designed as small as 15.0x15.0x2.5[mm³] for SMD (Surface Mount Device) type.

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http://www.jrc.co.jp/product/comm/deveice/saw/saw_top.html (Japanese)
http://www.jrc.co.jp/product/comm/device/saw/saw_top_e.html (English)

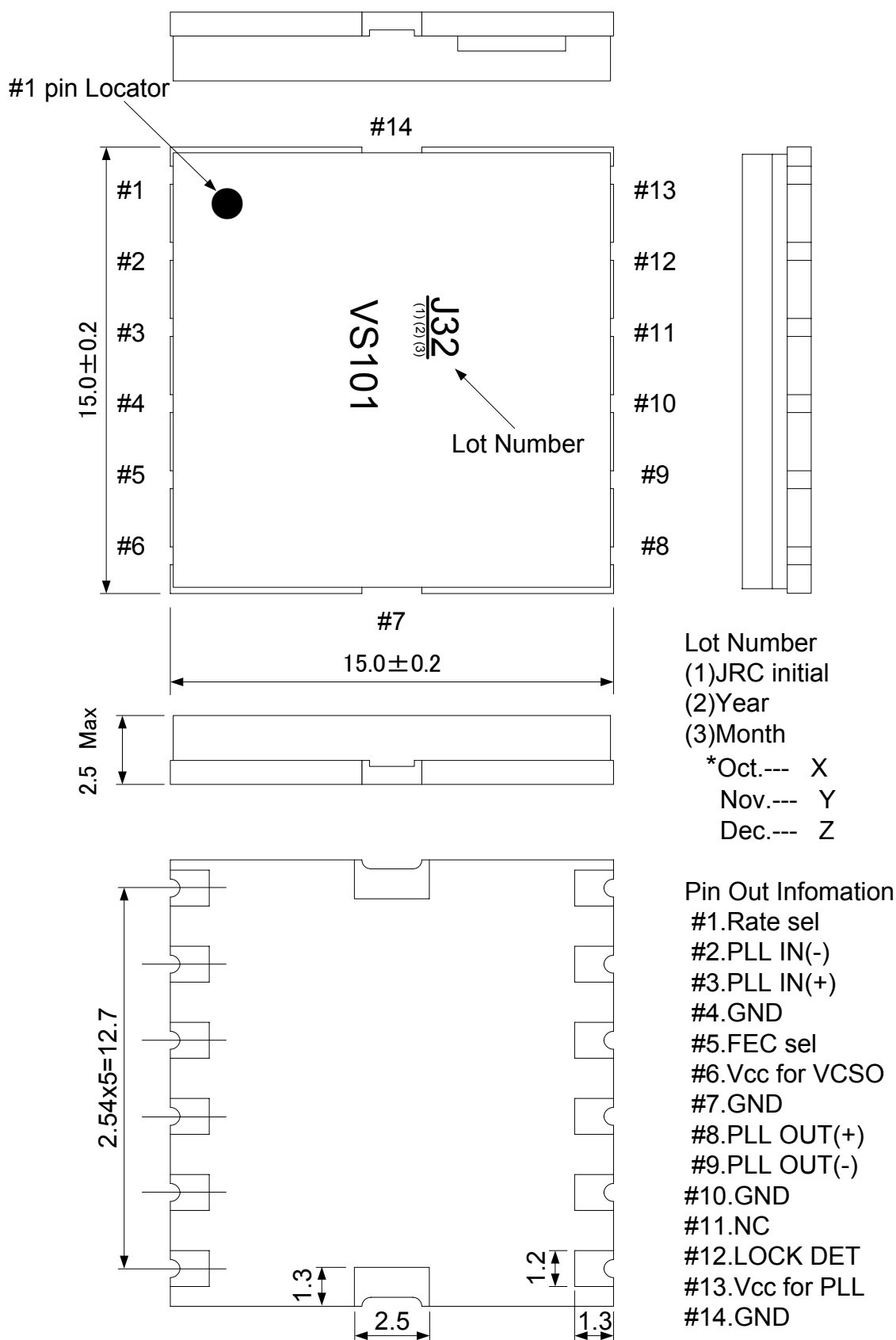


Fig.1 Package dimensions (in mm)

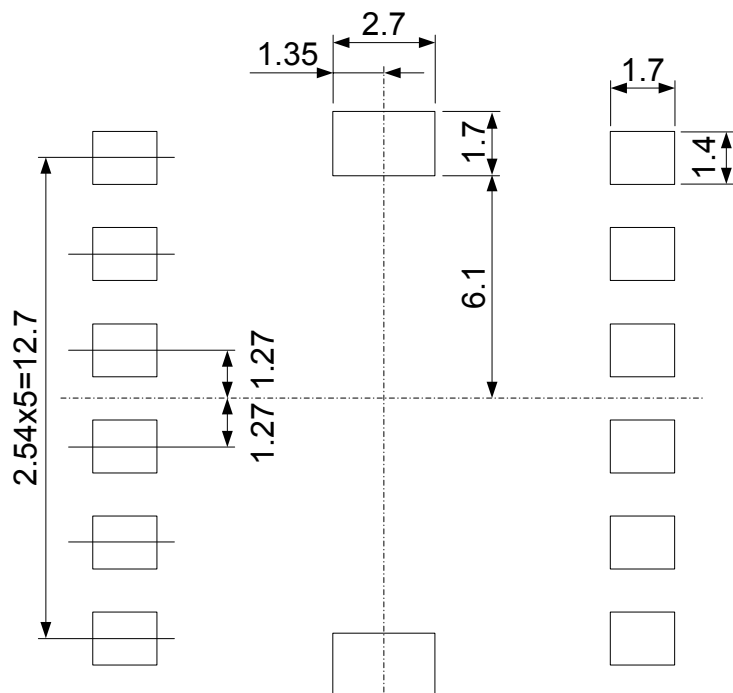
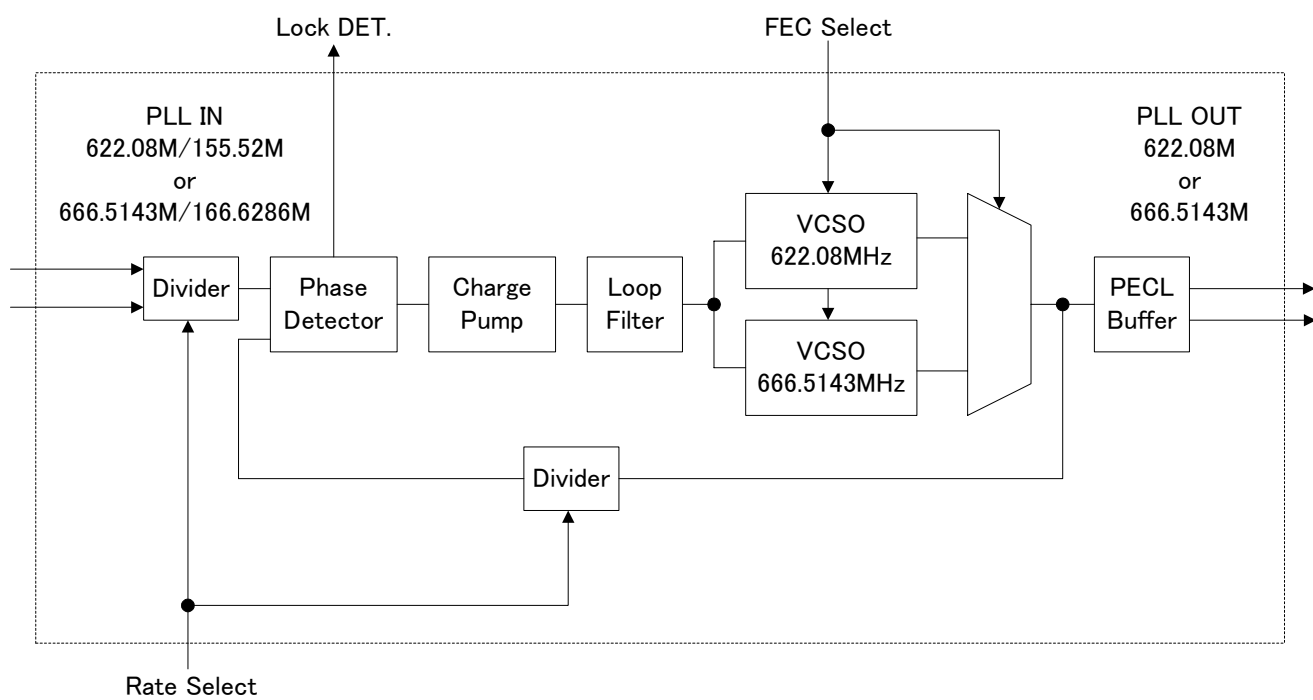


Fig.2 Desirable land area (in mm)

Block Diagram(Fig.3)



PLL INPUT Select

| | INPUT CLOCK [MHz] | | | |
|-------------|-------------------|----------|----------|----------|
| | 155.5200 | 622.0800 | 166.6286 | 666.5143 |
| FEC Select | 0 | 0 | 1 | 1 |
| Rate Select | Open | 0 | Open | 0 |

Fig.3 Block Diagram

Notice

1. Use this component within operating temperature range. It might not be satisfied with electrical specification without operating temperature range. When it is used less than -30°C or more than +85°C, it might be a cause of degradation or destruction of the component. Even if it endures during a short time, it causes degradation of qualification.
2. When soldering iron is used, solder with the temperature at the tip of soldering iron: 350°C max., the time of soldering: 10 seconds max., the power of soldering iron: 30W max..
3. Notice that the allowed time of soldering with soldering iron is accumulated time, when soldering is repeated.
4. As rapid temperature change for cleaning after reflow soldering might be a cause of destruction clean this component after confirming that temperature of this component goes down to room temperature.
5. Confirm that there are not any influence for qualification to this component in mounting on PCB when this component is cleaned.
6. As it might be a cause of degradation or destruction to apply static electricity to this component, do not apply static electricity or excessive voltage while assembling and measuring. And do not transport this component with bare hand.

Note

1. This specification specifies the quality of this component as a single unit. Make sure that this component is evaluated and confirmed against this specification when it is mounted to your products.

