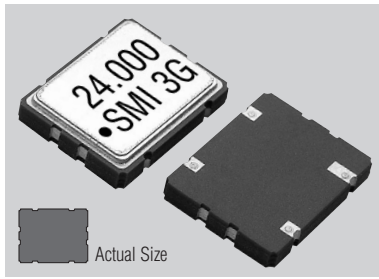


Crystal Clock Oscillators

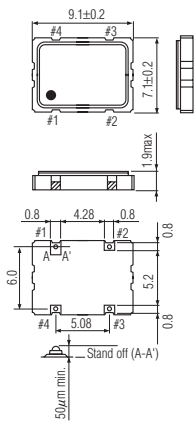
79SMO (+3.0V , +3.3V or +5.0V FIXED MODELS)

STANDARD SMD CLOCK OSCILLATORS

79SMO



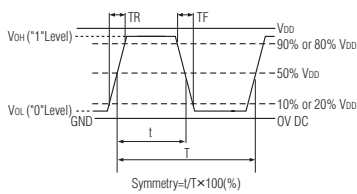
79SMO



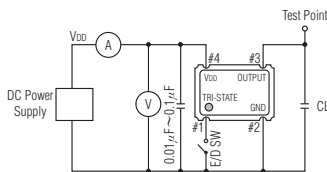
| PIN | CONNECTION |
|-----|-----------------|
| 1 | "L" OPEN or "H" |
| 2 | GND |
| 3 | Z OUTPUT |
| 4 | V _{DD} |

Z: high impedance

OUTPUT WAVEFORM

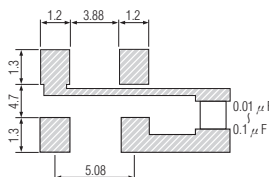


TEST CIRCUIT

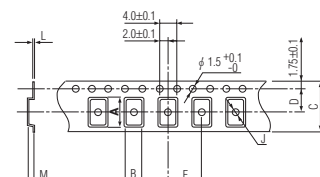


CL : including fixture and probe capacitance.

SOLDERING PATTERN



TAPE SPECIFICATIONS



| A | B | C | D | F | J | L | M | Reel Dia. | Qty/Reel |
|-----|-----|------|-----|------|-----|-----|-----|-----------|----------|
| 9.5 | 7.5 | 16.0 | 7.5 | 12.0 | 1.6 | 0.3 | 2.2 | 254 | 1000pcs |

STANDARD SPECIFICATIONS

| Item | Specifications | |
|--|--|---|
| Generic part number | 79SMO | |
| Frequency range | 1.000 MHz to 100.000 MHz | |
| Frequency stability (0°C to +70°C) over all conditions | 79SMO(3VB) ±50 ppm 79SMO(3VC) ±30 ppm 79SMO(3VD) ±25 ppm 79SMO(3VE) ±20 ppm | 79SMO(J) ±50 ppm 79SMO(K) ±30 ppm 79SMO(L) ±25 ppm 79SMO(M) ±20 ppm |
| Operating Conditions | 0°C to +70°C | |
| Operating temperature | 0°C to +70°C | |
| Input voltage (V _{DD}) | +3.0V or +3.3V DC ±0.3V | +5V DC ±0.5V |
| OE control voltage | V _{IH} : 0.8V _{DD} min. V _{IL} : 0.2V _{DD} max. | V _{IH} : 2.0V _{DD} min. V _{IL} : 0.8V _{DD} max. |
| Internal crystal | oscillation (Pin#1 = V _{IL}) | |
| Absolute Max. Rating | -0.5V to +7.0V | |
| Supply voltage | -0.5V to +7.0V | |
| Storage temperature | -50°C to +125°C | |
| Input current (+25°C) | 10 mA max. (1.0 MHz to 25.0 MHz) 20 mA max. (25.0 MHz to 50.0 MHz) 30 mA max. (50.0 MHz to 100.0 MHz) | 15 mA max. (1.0 MHz to 25.0 MHz) 30 mA max. (25.0 MHz to 50.0 MHz) 50 mA max. (50.0 MHz to 100.0 MHz) |
| Output (0°C to +70°C) | 40% to 60% at 50% V _{DD} level | |
| Symmetry | 40% to 60% at 50% V _{DD} level | |
| Rise and fall times (10%V _{DD} to 90%V _{DD} level) | 5 ns max. | 8 ns max. (1.0 MHz to 40.0 MHz) 6 ns max. (40.0 MHz to 100.0 MHz) |
| "0" level | V _{OL} : 0.4V max. | V _{OL} : 0.5V max. |
| "1" level | V _{OH} : V _{DD} - 0.4V min. | V _{OH} : V _{DD} - 0.5V min. |
| Load | 15pF max. (CMOS) | 50 pF max. (1.0 MHz to 50.0 MHz) 30 pF max. (50.0 MHz to 100.0 MHz) |
| Enable/Disable delay time | 100 ns max. | |
| Startup time | 10 ms max. | |
| Aging | ±5 ppm max. at +25°C ±3°C for first year | |
| Reflow soldering condition | +240°C ±5°C for 10 seconds +150°C ±10°C for 1 to 2 minutes (preheating) | |

PACKAGE DATA

| Item | Package | 79SMO |
|------------------|---------|---------|
| Lid | | Metal |
| Base | | Ceramic |
| Sealing | | Seam |
| Terminal plating | | Gold |