

| | | | | |
|----------------------------------|-----|-----------|------|------|
| RoHS Compliant Pb - Lead Free | Ltr | Revisions | Date | Appr |
| | | | | |
| | | | | |
| | | | | |

Electrical Specifications:

| | | | | | | | |
|---------------------------------|------------------------|------------------|----------|-----------|-----------|--------------|------------|
| Frequency Range | | 0.500 to 156.000 | | | | | MHz |
| Temperature Stability | | ±100 | | | | | PPM Max |
| | | ±50 | | | | | |
| | | ±30 | | | | | |
| | | ±25 | | | | | |
| Aging per Year | | ±3 | | | | | |
| Operating Temperature Range | Standard | -10 to +70 | | | | | °C |
| | Extended | -40 to +85 | | | | | |
| Storage Temperature Range | | -55 to +125 | | | | | |
| Supply Voltage | | 1.8 ± 5% | 2.5 ± 5% | 2.85 ± 5% | 3.3 ± 10% | 5.0 ± 10% | Vdd |
| Input Current | 1.000 to 32.000 MHz | 7 | 8 | 15 | 7 | 25 | mA Max |
| | 32.100 to 50.000 MHz | 15 | 20 | 20 | 12 | 30 | |
| | 50.100 to 70.000 MHz | 15 | 12 | 25 | 25 | 40 | |
| | 70.100 to 80.000 MHz | 15 | 20 | 30 | 25 | 50 | |
| | 80.100 to 125.000 MHz | 20 | 25 | 35 | 30 | 60 | |
| | 125.100 to 156.000 MHz | 25 | 30 | 40 | 40 | 80 | |
| Output Voltage | Logic High (Voh) | 90% (80% at 1.8) | | | | | Vdd Min |
| | Logic Low (Vol) | 10% (20% at 1.8) | | | | | Vdd Max |
| Output Symmetry | Standard | 40 to 60 | | | | | % |
| | Tight | 45 to 55 | | | | | |
| Output Load | 15 | | | | | pF Max HCMOS | |
| | 30 | | | | | | |
| | 50 | | | | | | |
| Rise and Fall Time | 1.000 to 32.000 MHz | 5 | 5 | 6 | 10 | 10 | ns Max |
| | 32.100 to 50.000 MHz | 5 | 5 | 6 | 10 | 5 | |
| | 50.100 to 70.000 MHz | 4 | 4 | 4 | 6 | 5 | |
| | 70.100 to 80.000 MHz | 4 | 4 | 4 | 5 | 5 | |
| | 80.100 to 125.000 MHz | 3 | 3 | 4 | 5 | 4 | |
| | 125.100 to 155.520 MHz | 3 | 3 | 3 | 4 | 4 | |
| Phase Jitter (12 KHz to 20 MHz) | | 1 | | | | | ps Max RMS |
| Enable-Disable Function | | Tri-State | | | | | - |
| Output Disable Time | | 300 | 150 | | | | ns Max |
| Output Enable Time | | 10 | 10 | | | | ms Max |
| Start Up Time | | 10 | | | | | ms Max |

Temperature stability is Inclusive of all conditions:

Calibration Tolerance at +25°C, frequency stability over the operating temperature range, supply voltage, supply voltage change, output load changes, shock, vibration, and 1st year aging at +25°C.



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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: MK

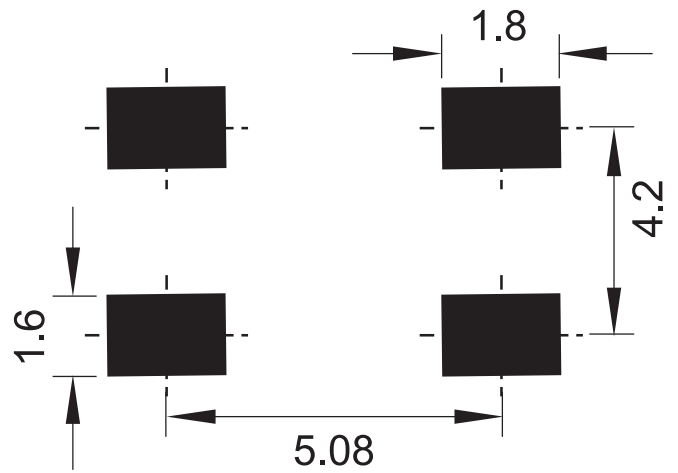
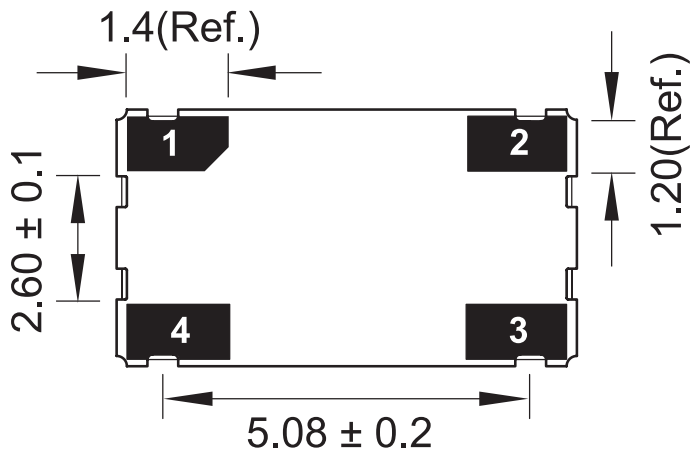
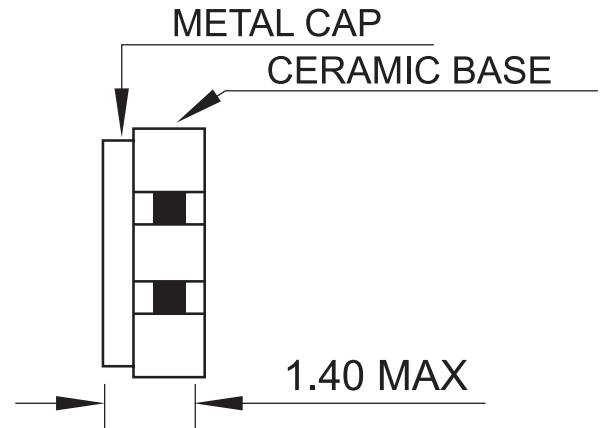
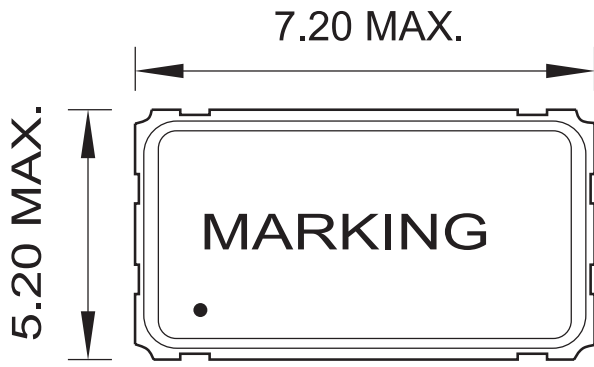
Page: 1/4 Date: Oct 13, 2017

Specification Title:

**Clock Oscillator
Low Profile
5.0 x 7.0 millimeter Surface Mount
General Product Specification**

Part Number: **S7 Series**

Mechanical Outline:



#1 : E/D #2 : GND
 #4 : VDC #3 : OUTPUT

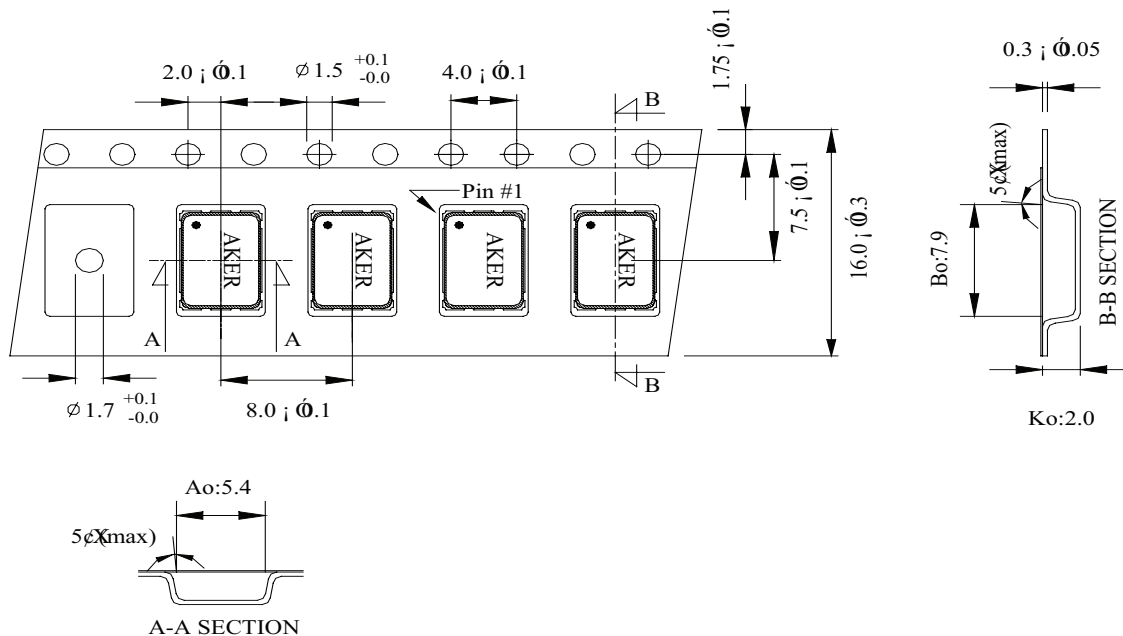
Bottom

Recommended Land Pattern

| | |
|---------------------|-----------------------|
| Pin1 | Pin 3 |
| INH | Output |
| High or Open | Operating |
| Low | High Impedance |

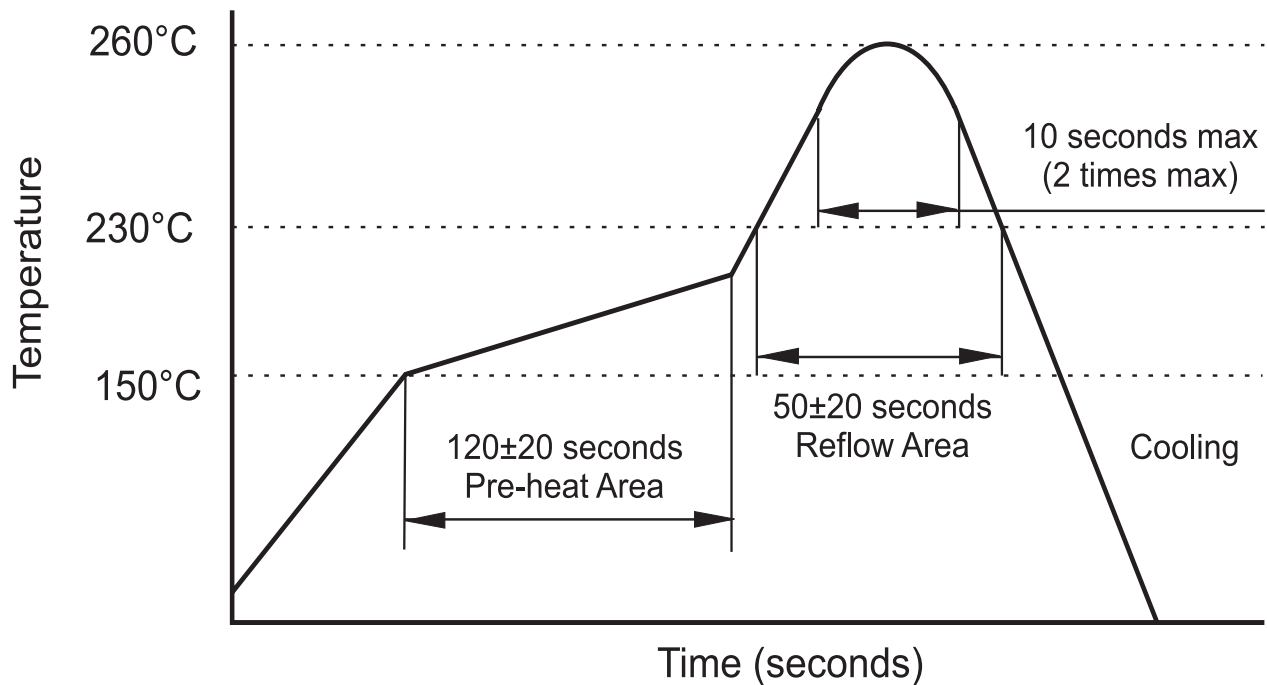
**Package is Seam Sealed Ceramic-Metal.
 Dimensions are millimeters.**

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:



How to build a Part Number:

| | | |
|------------------------------|-------------------------|-----------------------|
| Series | S | Parameter |
| Package | 7 | 5.0 x 7.0 mm |
| | | |
| Supply Voltage | 50 | +5.0 Vdd ± 10% |
| | 33 | +3.3 Vdd ± 10% |
| | 28 | +2.8 Vdd ± 5% |
| | 25 | +2.5 Vdd ± 5% |
| | 18 | +1.8 Vdd ± 5% |
| | | |
| Temperature Stability | 10 | ±100 PPM |
| | 05 | ±50 PPM |
| | 03 | ±30 PPM |
| | 025 | ±25 PPM |
| | | |
| Duty Cycle | See Notes | 40 / 60 % |
| | T | 45 / 55 % |
| | | |
| Frequency | 0.500 to 156.000 | MHz |
| | | |
| Temperature Range | See Notes | -10 to +70 °C |
| | X | -40 to +85 °C |
| | | |
| Output Load | 15 | pF Max HCMOS |
| | 30 | |
| | 50 | |
| | | |
| Packaging | M | 250pcs Reel |
| | R | 1000pcs Reel |

Part Number Example:

S73305T-50.000-X-15-R

S7: 5.0 x 7.0 mm SMD Package

33: +3.3 Vdd Supply Voltage

05: ±50 PPM Temperature Stability

T: 45/55% Tight Symmetry

50.000 MHz Nominal Frequency

X: -40 to + 85° C Extended Temperature Range

15: 15 pF Max HCMOS Output Load

R: Tape and Reel Packaging

Notes:

- 1- Standard Duty Cycle and Temperature Range do not need to be included in Part Number description.
- 2- Quantities less than 250pcs are shipped in tape only.
- 3- Specification subject to change without notice.