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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY 25.000000 MHz

HOLDER TYPE TYPE FK 3.2x2.5 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

SPEC. NO. (P/N) FK2500067

CUSTOMER P/N _____

ISSUE DATE January 10, 2014

VERSION A

| APPROVED | PREPARED | QA |
|------------------------|----------|------------|
| Brenda | Nikki Lu | Becky Wu |
| APPROVED BY CUSTOMER : | | AVL Status |
| | | |

Please return one copy with approval to PSE-TW

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*Pb-free
*RoHS Compliant
*HF-Halogen Free
*REACH Compliant

*** A company of  PERICOM Semiconductor Corporation ***

TYPE FK 3.2x2.5 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

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VERSION HISTORY

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ELECTRICAL SPECIFICATIONS

SRe Part Number : **FK2500067**

| Item | Symbol | Specifications | Units | Notes |
|---------------------------------|--------------------------------|---------------------|-------|--------------------------------------|
| Nominal Frequency | F ₀ | 25.000000 | MHz | |
| Frequency Stability | F _T | ± 50 | ppm | **See note |
| Operating Temperature Range | T _R | -40 to +105 | °C | |
| Supply Voltage | V _{DD} | +3.3 ± 5.0% | V | |
| Logic Type | L _T | LVCMOS | | |
| Supply Current, Output Enabled | I _{DD/OE} | 10 | mA | Max. |
| Supply Current, Output Disabled | I _{DD/OD} | 10 | µA | Max. |
| Duty Cycle (Symmetry) | D _{C/SY} | 45 / 55 | % | Measured 50% of Waveform |
| Rise / Fall Time | T _{R/T_F} | 5 | ns | Max. measured 10/90% of Waveform |
| Output Voltage "0" Level | V _{OL} | 10% V _{DD} | V | Max at I _{OL} = 4.0mA Min. |
| Output Voltage "1" Level | V _{OH} | 90% V _{DD} | V | Min at I _{OH} = -4.0mA Max. |
| Output Load | C _L | 15 | pF | Max. |
| Jitter, Phase | RMS | 1 | ps | Max. 12KHz ~ 5MHz Frequency Band |
| Jitter, Accumulated | RMS(1- σ) | 3 | ps | Typ. 20,000 Consecutive Periods |
| Jitter, Peak to Peak | P _k -P _k | 30 | ps | Max. 100,000 Random Periods |
| Start Up Time | | 10 | ms | Max. |
| Storage Temperature Range | | -55°C to +125°C | °C | |

※ This product doesn't include harmful substance that stipulated by SONY SS-00259 Level 1 and S-AT2-001 Level 1 standard. RoHS Compliant (Pb - Free).

**Stability includes all combinations of Operating Temperature, Load changes, rated Input (Supply) Voltage changes, Initial Calibration Tolerance (25°C), Aging (1 year at 25°C Average Effective Ambient Temperature), Shock and Vibration.

Output Enable / Disable Function

| Parameter | Min. | Typ. | Max. | Units | Notes |
|--|--------------------|------|--------------------|-------|----------------|
| Input Voltage (Pin1), Output Enable | 0.7V _{DD} | | | V | Or Open |
| Input Voltage (Pin1), Output Disable (low power standby) | | | 0.3V _{DD} | V | Output is Hi-Z |
| Output Disable Delay | | | 0.1 | µs | |
| Output Enable Delay | | | 2 | ms | |

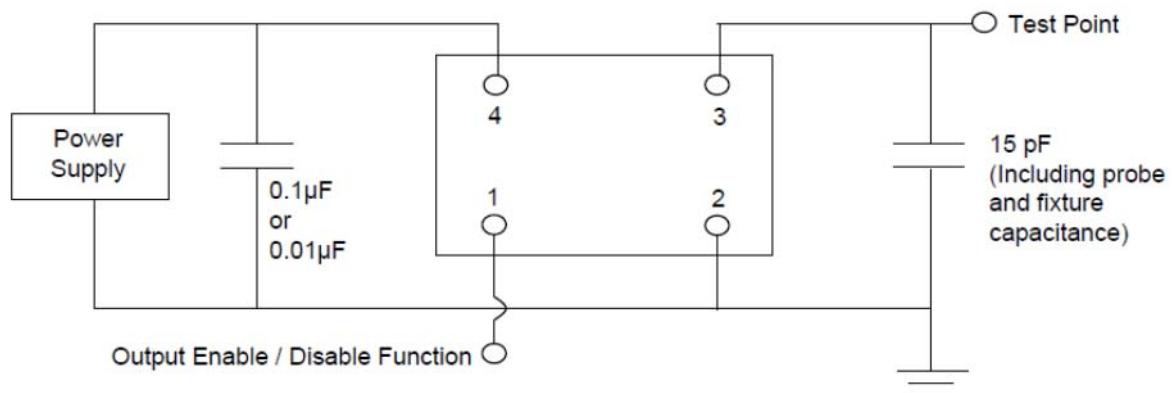


TYPE FK 3.2x2.5 SEAM SEALED CRYSTAL CLOCK OSCILLATOR

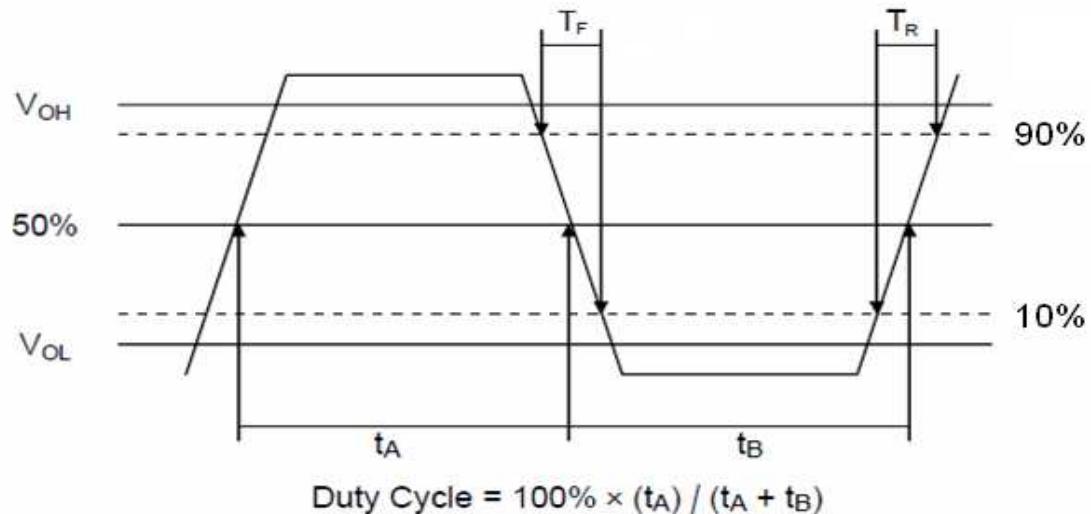
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TEST CIRCUIT



OUTPUT WAVEFORM



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RELIABILITY SPECIFICATIONS

ENVIRONMENTAL:

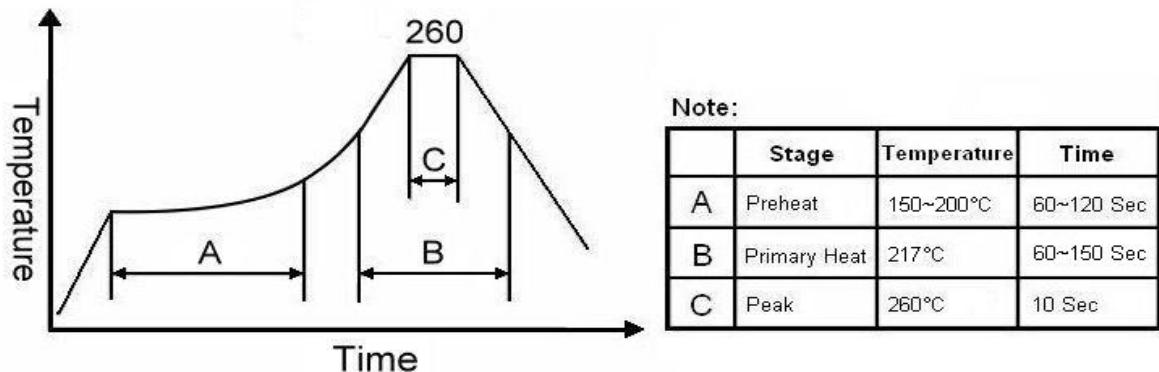
- a) THERMAL SHOCK: MIL-STD-883, Method 1011, Condition A
- b) MOISTURE RESISTANCE: MIL-STD-883, Method 1004
- c) VIBRATION: MIL-STD-883, Method 2007, Condition A
- d) RESISTANCE TO SOLDERING HEAT: J-STD-020D Table 5-2 Pb-free devices
(except 2 cycles max)
- e) HAZARDOUS SUBSTANCE: Pb - free and RoHS Compliant.

MECHANICAL:

- a) SHOCK: MIL-STD-883, Method 2002, Condition B
- b) SOLDERABILITY: JESD22-B102-D Method 2 (Preconditioning E)
- c) TERMINAL STRENGTH: MIL-STD-883, Method 2004, Test Condition D
- d) GROSS LEAK: MIL-STD-883, Method 1014, Condition C
- e) FINE LEAK: MIL-STD-883, Method 1014, Condition A2, $R1=2\times10^{-8}$ atm cc/s
- f) SOLVENT RESISTANCE: MIL-STD-202, Method 215

SUGGESTED IR REFLOW PROFILE

*As per IPC-JEDEC J-STD-020D



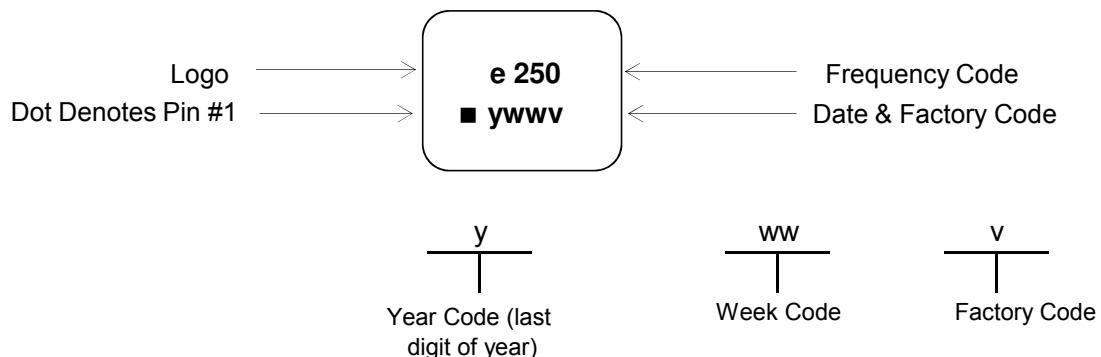
For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/pdf/sre/reflow.pdf>

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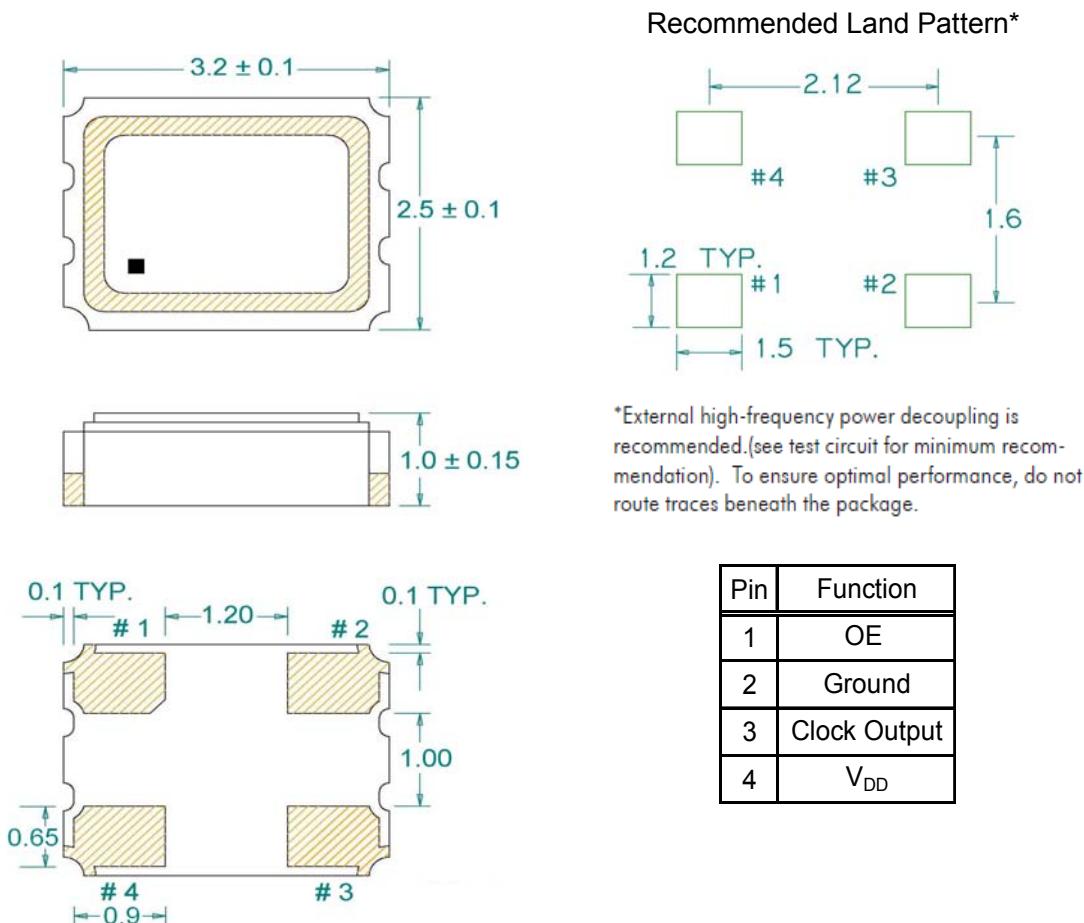
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MARKING



MECHANICAL DRAWINGS (Scale: None. Dimensions are in mm.)

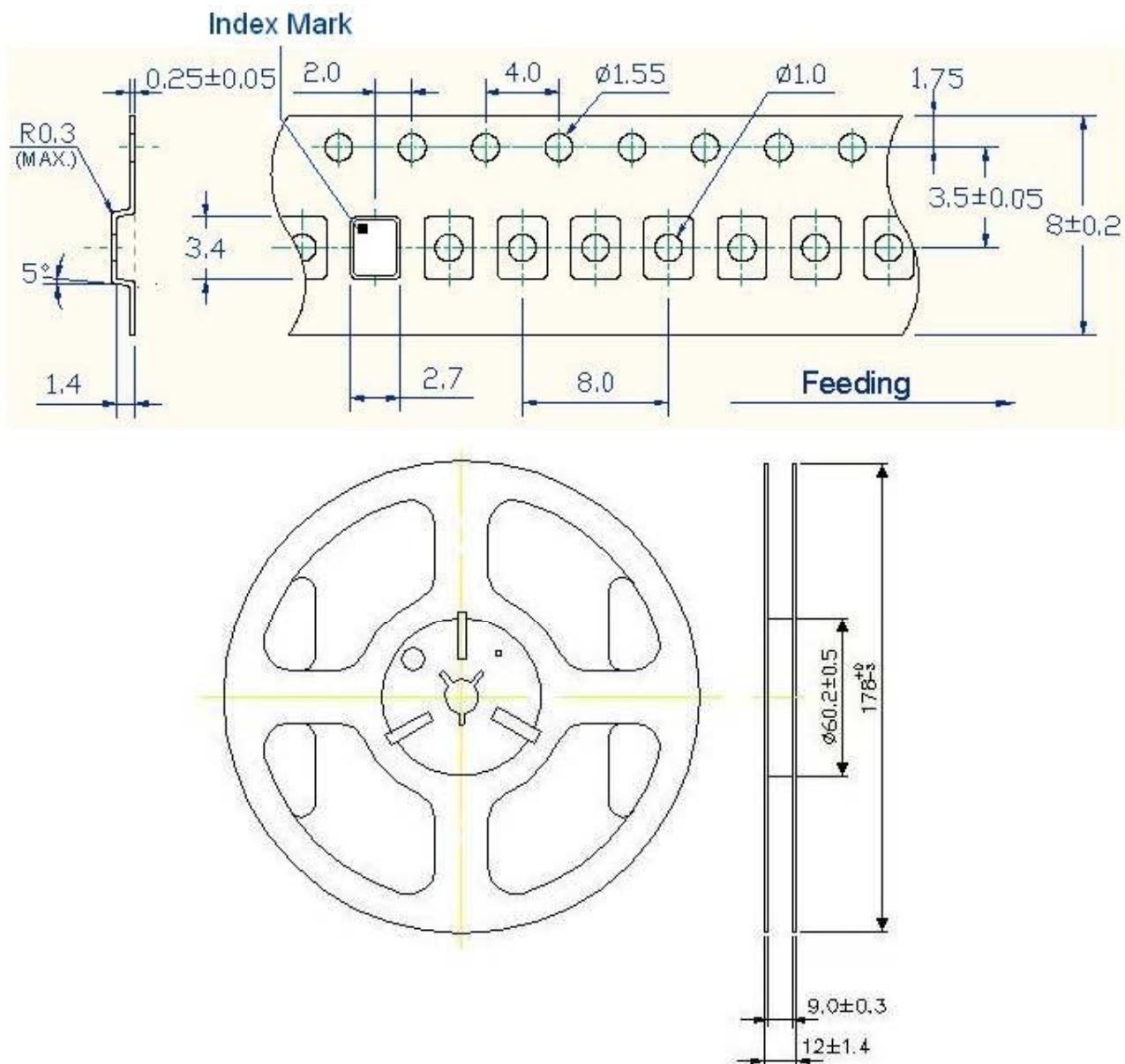


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TAPE&REEL



1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

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PACKING

