

# 1.8V CMOS COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR

ASFL3



RoHS  
Compliant



5.0 x 3.2 x 1.6 mm

## FEATURES:

- Tri-state function
- Suitable for high density SMT
- Available tight stability option, +/-20ppm
- Seam sealed package assures high reliability
- Suitable for RoHS reflow

## APPLICATIONS:

- CCD clock for VTR camera
- Equipment connected to PC or PC cards
- Thin equipment
- Wireless communication

## STANDARD SPECIFICATIONS:

### PARAMETERS

|                              |                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------|
| ABRACON P/N:                 | ASFL3 Series                                                                         |
| Frequency:                   | 0.5 MHz to 125 MHz                                                                   |
| Operating temperature:       | -10°C to +70°C (see option)                                                          |
| Storage temperature:         | - 55°C to + 125°C                                                                    |
| Overall Frequency Stability: | ±100 ppm max. (see option)                                                           |
| Supply voltage (Vdd):        | 1.8 Vdc ± 10%                                                                        |
| Supply Current (Idd):        | See table below                                                                      |
| Symmetry at 1/2 Vdd:         | 40/60% max. (see option)                                                             |
| Rise and Fall Times(Tr/Tf):  | See table below                                                                      |
| Output load:                 | 15pF max.*                                                                           |
| Output Voltage:              | VOH = 0.9*Vdd min., VOL = 0.1*Vdd max.                                               |
| Tri-state Function:          | "1" or open;; Oscillation; VIH > 0.7*Vdd, "0": Output disabled (HI-Z); VIL < 0.3*Vdd |
| Start-up-time:               | See table below                                                                      |
| Aging (First year):          | ±3 ppm max. @25°C                                                                    |
| Period Jitter:               | See table below                                                                      |

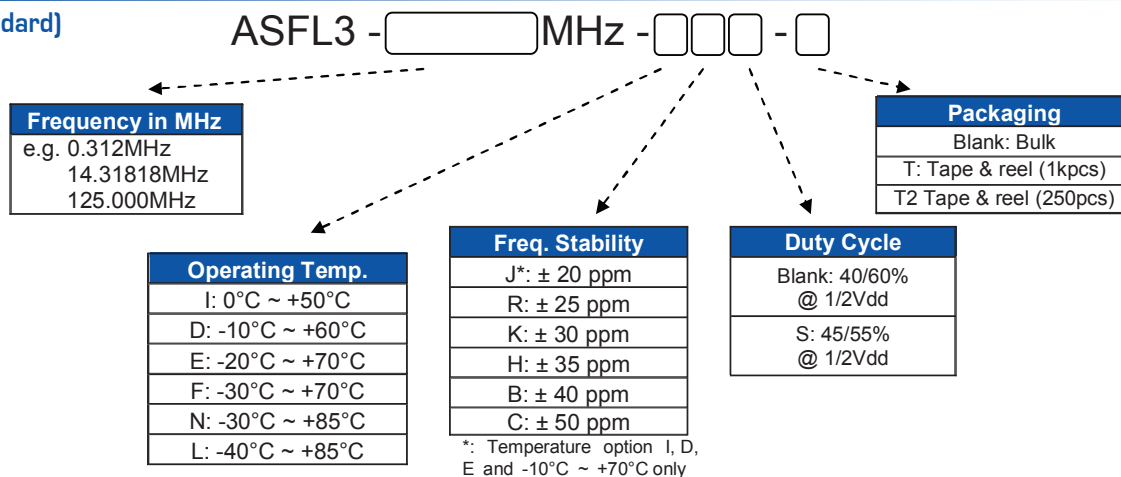
Table:

\* 30pF max is available. Please contact ABRACON.

| Frequency range (MHz) | Idd mA (Typ) | Idd mA (Max) | Tr/Tf ns (Typ) | Tr/Tf ns (max) | Start-up time ms (Typ) | Start-up time ms (Max) | Period Jitter RMS ps (Typ) | Period Jitter RMS ps (Max) |
|-----------------------|--------------|--------------|----------------|----------------|------------------------|------------------------|----------------------------|----------------------------|
| 0.5~9.999             | 2            | 5            | 5              | 10             | 3                      | 5                      | 2                          | 3                          |
| 10.000~29.999         | 5            | 8            | 3              | 6              | 3                      | 5                      | 2                          | 3                          |
| 30.000~49.999         | 8            | 10           | 3              | 6              | 3                      | 5                      | 2                          | 3                          |
| 50.000~69.999         | 5            | 10           | 2              | 5              | 3                      | 5                      | 2                          | 3                          |
| 70.000~99.999         | 8            | 15           | 2              | 5              | 4                      | 10                     | 2                          | 3                          |
| 100.000~125.000       | 12           | 20           | 2              | 4              | 4                      | 10                     | 2                          | 3                          |

## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)



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ASFL3

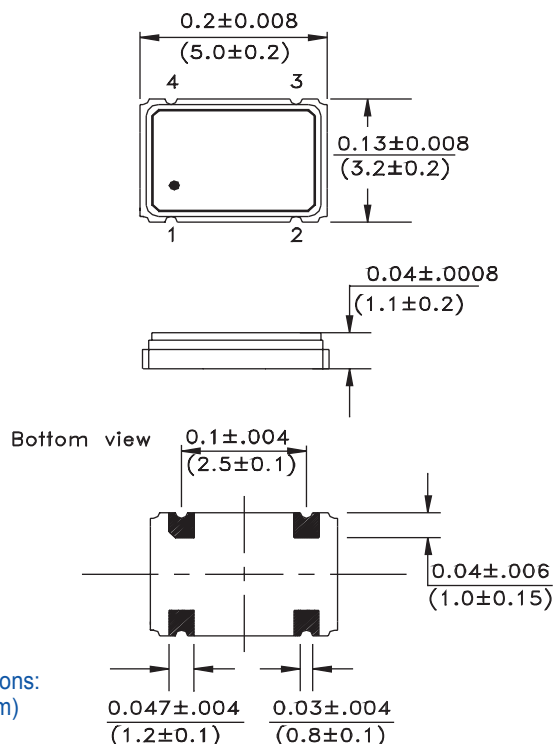


**RoHS**  
Compliant

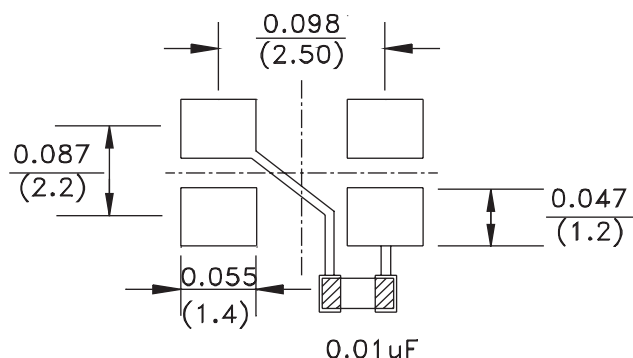


5.0 x 3.2 x 1.6 mm

## OUTLINE DRAWING:



## Recommended land pattern

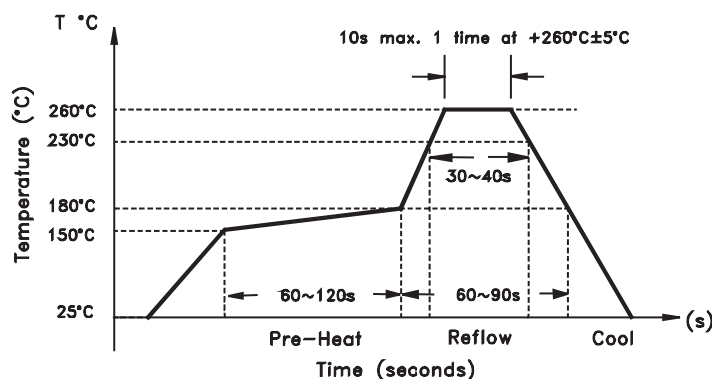
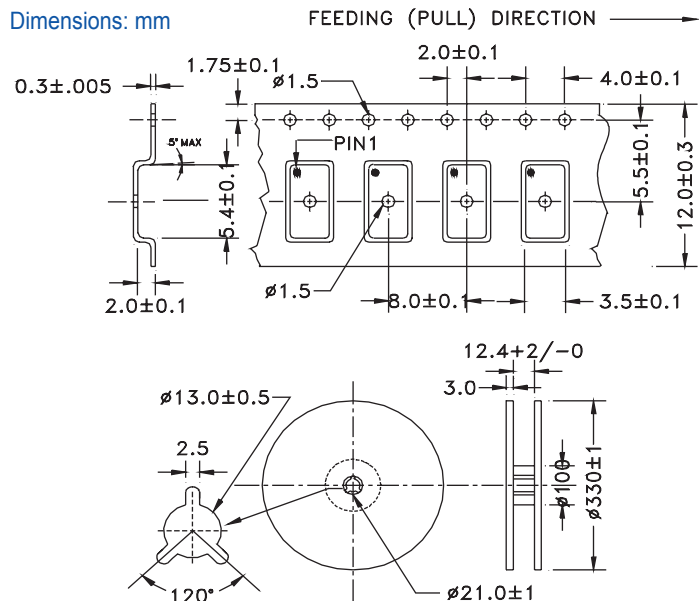


| PIN | FUNCTION  |
|-----|-----------|
| 1   | Tri-State |
| 2   | GND       |
| 3   | Output    |
| 4   | VDD       |

**Note:** It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

## TAPE & REEL: Tape and reel 1,000pcs/reel

## REFLOW PROFILE:



Need a test socket for the ASFL3 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#).

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