



RoHS
Compliant

3.2 x 2.5 x 0.9mm

▷ FEATURES:

- Highly reliable seam-sealed package
- Low current consumption 7mA
- Low phase noise and jitter
- Industrial grade tight temperature stability available ($\pm 10\text{ppm}$ / -40 to +85°C)
- Fast start-up time 0.2ms typical
- CMOS output with Tri-state function

▷ APPLICATIONS:

- Home networking by AC socket
- Wireless LAN
- Mobile communications
- PLC modem
- WiMax

▷ STANDARD SPECIFICATIONS:

| PARAMETERS | |
|--------------------------------|--|
| ABRACON P/N: | ASET Series |
| Frequency: | 4.000MHz to 54.000MHz |
| Standard Frequencies: | 5, 10, 12, 16, 20, 24, 26, 27, 32, 40, 44MHz |
| Output level: | CMOS |
| Operating temperature: | - 40°C to +85°C |
| Storage temperature: | - 40°C to +85°C |
| Overall Frequency Stability*: | $\pm 15\text{ppm}$ (see options) |
| Supply voltage (Vdd): | 3.0Vdc $\pm 10\%$ (see options) |
| Supply Current (Idd): | 7mA max. |
| Stand-by Current | 10 μ A max. |
| Symmetry: | 45/55 % @ 50 % Vdd |
| Rise and Fall Times(Tr/Tf): | 5ns max. / 10 %Vdd-90%Vdd |
| Start-up time: | 0.2ms typical, 3ms max. |
| Output load: | 15pF max. |
| Output Voltage : | VOH = 0.9*Vdd min. VOL = 0.1*Vdd max. |
| Aging @ 25°C: | $\pm 2\text{ ppm}$ / first year, $\pm 7\text{ ppm}$ / 10 years |
| Phase Noise (@ 10 kHz offset): | -143dBc/Hz Typ. |
| Jitter: | 1 σ 3ps typ. |

* Overall frequency stability includes initial tolerance @ +25°C, and temperature stability.

▷ OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

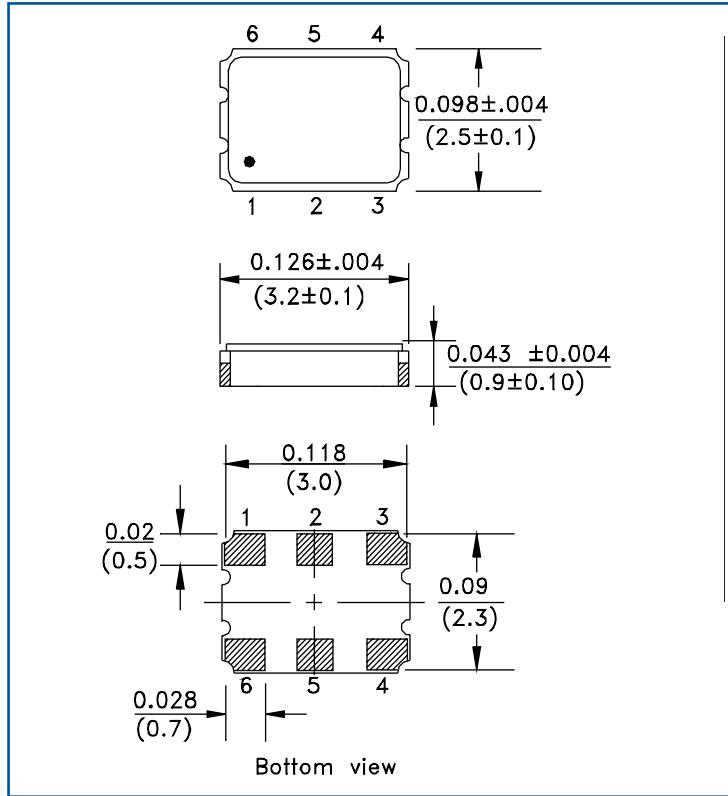
ASET - - Frequency - -

| P/N and Vdd (V) | | Frequency | Freq. Stability | | Packaging | |
|-----------------|----------------|-------------|-----------------|---------------------|-----------|---------------|
| Blank | $3.0 \pm 10\%$ | XX.XXXX MHz | Blank | $\pm 15\text{ ppm}$ | Blank | Bulk |
| A | $2.7 \pm 10\%$ | | Y | $\pm 10\text{ ppm}$ | | |
| B | $3.3 \pm 10\%$ | | R7* | $\pm 7\text{ ppm}$ | | |
| C | $2.8 \pm 10\%$ | | R5* | $\pm 5\text{ ppm}$ | T | Tape and Reel |
| D | $2.5 \pm 10\%$ | | | | | |

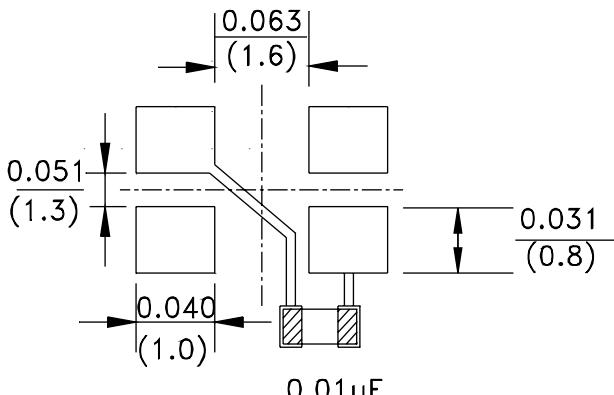
* Contact ABRACON for availability



► OUTLINE DRAWING:



Recommended land pattern



Resist layer is required on the path for the by-pass capacitor.

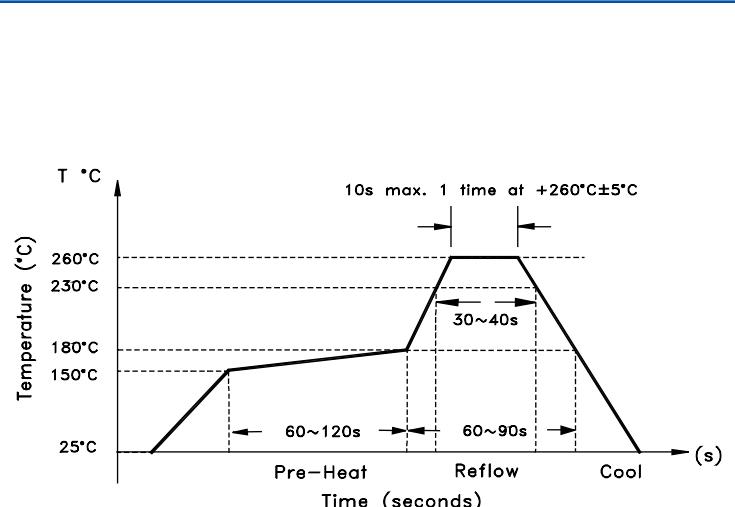
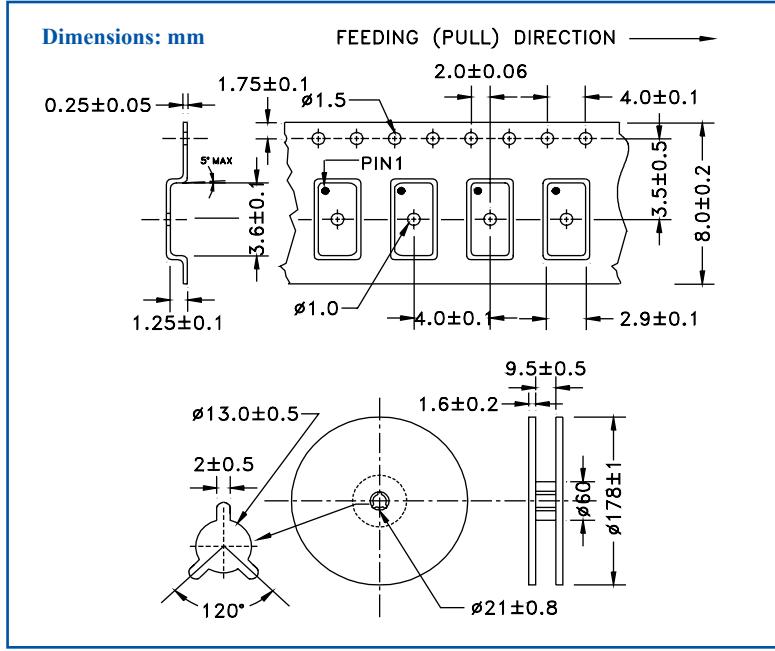
Note : It is recommended to use an approximately 0.01uF bypass capacitor between PIN 3 and 6.

Dimensions: Inches (mm)

| PIN | FUNCTION |
|-----|----------|
| 1 | OE |
| 2 | N.C. |
| 3 | GND |
| 4 | Output |
| 5 | N.C. |
| 6 | Vdd |

► **TAPE & REEL:** T= tape and reel (1,000 pcs/reel)

REFLOW PROFILE



Need a test socket for the ASET Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N: AXS-3225-04-05

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