

32.768kHz CERAMIC SMD CRYSTAL OSCILLATOR

ASFLK SERIES



5.0 x 3.2 x 1.3mm



FEATURES:

- Pb-Free/RoHS Compliant
- IR reflow capable
- Tri state function
- Seam sealed ceramic package
- Suitable for high density SMT

APPLICATIONS:

- CCD clock for VTR camera
- Computers and peripherals
- Portable MP3 players and games

STANDARD SPECIFICATIONS:

| PARAMETERS | |
|------------------------------|--|
| ABRACON P/N: | ASFLK Series |
| Frequency range: | 32.768kHz |
| Operating temperature: | 0°C to +70°C (see options) |
| Storage temperature: | -55°C to +125°C |
| Overall Frequency Stability: | ± 100ppm max. (see options) |
| Supply Voltage (Vdd): | 3.3 Vdc ± 10% (see options) |
| Supply current: | Vdd = 2.5 ~ 3.3V, 0.5mA typ. 1.0mA max. Vdd = 5.0V, 1.5mA typ. 5.0mA max. |
| Symmetry: | 40/60 % max. @ 1/2Vdd (see options) |
| Rise and fall time (Tr/Tf): | 250 ns max. |
| Output Load: | 15pF or 10TTL max. |
| Output Voltage: | VOH = 2.97V min. VOL = 0.33V max. |
| Start-up-time | 30ms max. |
| Tristate function: | Logic "1" or open: Oscillation Logic "0" (VIL < 0.8 Vdc) : Hi Z |
| Aging at 25°C/year : | ± 3ppm/year max. |
| Phase jitter: | 1ps RMS max. |

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ASFLK-□ - 32.768kHz - □ - □ - □ - □

| Supply Voltage | |
|----------------|----------|
| Blank | 3.3V±10% |
| 1 | 3.0V±10% |
| 2 | 2.5V±10% |
| 4 | 5.0V±10% |

| Operating Temp. | |
|-----------------|----------------|
| E | -20°C to +70°C |
| F | -30°C to +70°C |
| N | -30°C to +85°C |
| L | -40°C to +85°C |

*Contact ABRACON for extended temperature range.

| Packaging | |
|-----------|---------------|
| T | Tape and Reel |

| Freq. Stability | |
|-----------------|--------|
| J | ±20ppm |
| R | ±25ppm |
| K | ±30ppm |
| H | ±35ppm |
| B | ±40ppm |
| C | ±50ppm |

| Symmetry | |
|----------|----------------------|
| S | 45/55% max at 1/2Vdd |

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ASFLK

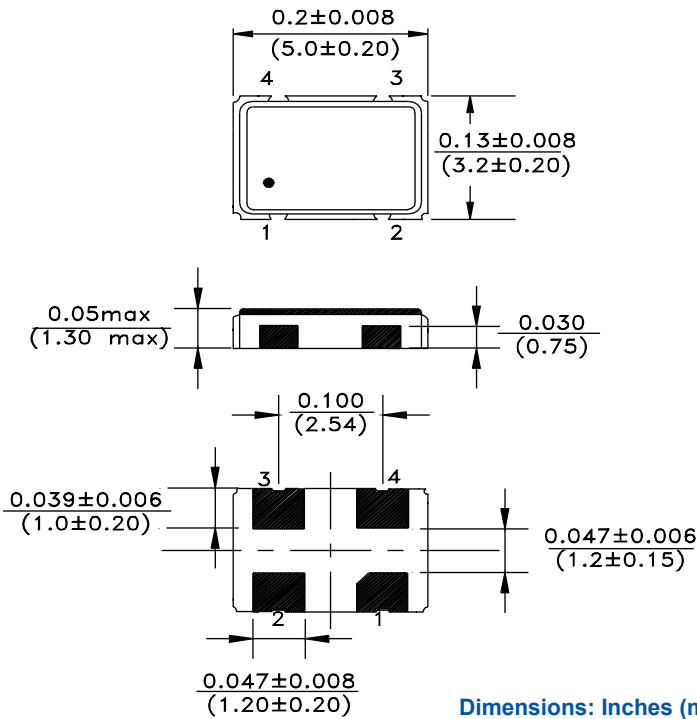
5.0 x 3.2 x 1.3mm

ASFLK SERIES

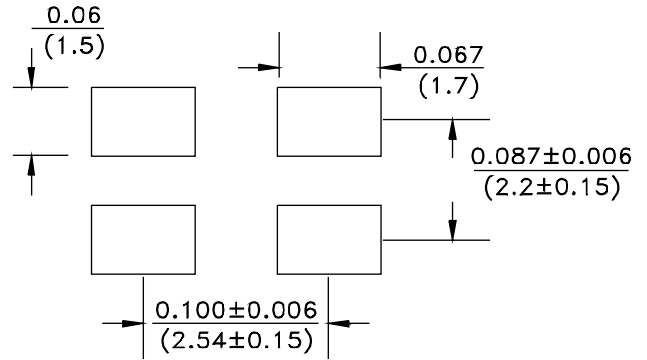


RoHS
Compliant

OUTLINE DRAWING:



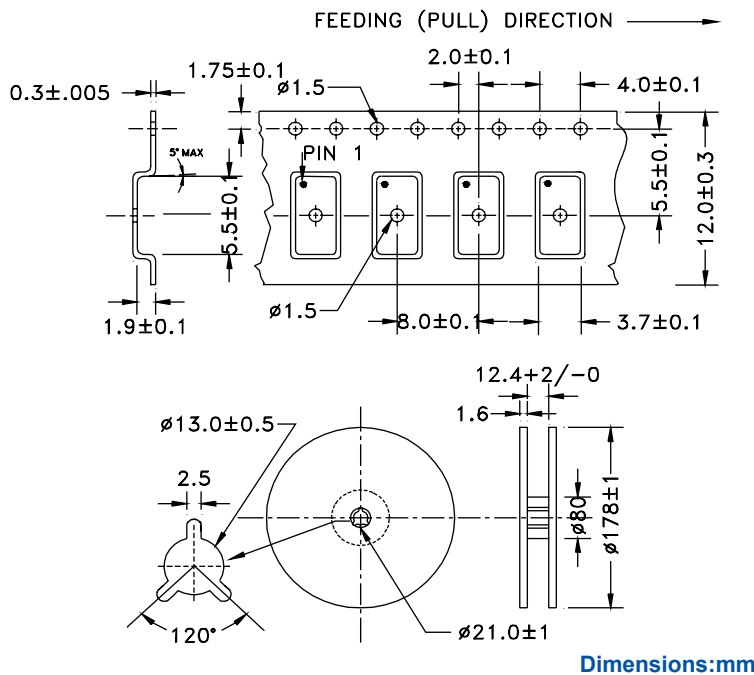
Recommended Land Pattern



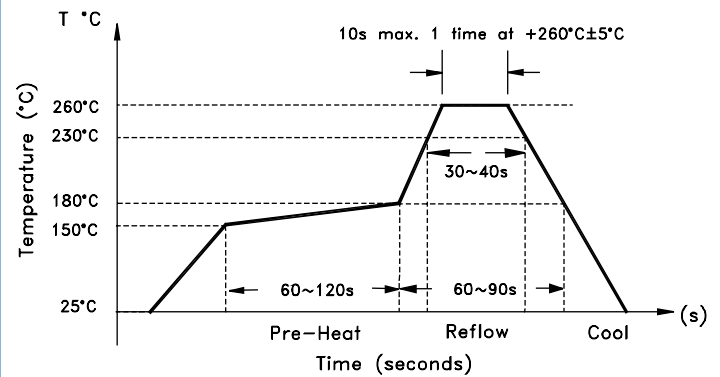
Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

| PIN | FUNCTION |
|-----|-----------|
| 1 | Tri-state |
| 2 | GND |
| 3 | Output |
| 4 | Vdd |

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



REFLOW PROFILE



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

* **NOTE:** Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



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