



O-6000AT Series



| 1. Specification | | |
|--|---|------------------|
| Frequency range: | 5 ... 100 MHz | |
| Type: | O-6500AT | O-6300AT |
| Supply voltage V_S : | +5.0 V \pm 5 % | +3.3 V \pm 5 % |
| Frequency stability vs. temperature options: | | |
| $\leq \pm 2 \times 10^{-8}$ vs. 0 °C to +50 °C: | 650x | 630x |
| $\leq \pm 3 \times 10^{-8}$ vs. -10 °C to +60 °C: | 651x | 631x |
| $\leq \pm 1 \times 10^{-7}$ vs. -20 °C to +70 °C: | 652x | 632x |
| $\leq \pm 5 \times 10^{-8}$ vs. -20 °C to +70 °C: | 653x | 633x |
| $\leq \pm 1 \times 10^{-7}$ vs. -40 °C to +85 °C: | 654x | 634x |
| Aging stability option (after 30 days of continuous operation) | | |
| $< \pm 1 \times 10^{-9}$ / day; $< \pm 1 \times 10^{-7}$ / year: | 65x1 | 63x1 |
| $< \pm 2 \times 10^{-9}$ / day; $< \pm 2 \times 10^{-7}$ / year: | 65x2 | 63x2 |
| $< \pm 3 \times 10^{-9}$ / day; $< \pm 3 \times 10^{-7}$ / year: | 65x3 | 63x2 |
| Frequency stability vs. supply voltage changes $V_S \pm 5$ %: vs. load changes ± 5 %: | $\leq \pm 1.0 \times 10^{-8}$ $\leq \pm 5.0 \times 10^{-9}$ | |
| Frequency control by external voltage 0 V ... V_{REF} : | $\geq \pm 3$ ppm | |
| Transfer function / Linearity: | Positive / ≤ 10 % | |
| Reference voltage V_{REF} : | +4.0 V \pm 5 % | +3.0 V \pm 5 % |
| Power consumption @ +25 °C steady state: during warm-up: | ≤ 1.5 W ≤ 3.5 W | |
| Warm-up time: (for a typical accuracy of $\leq \pm 5 \times 10^{-8}$ @ +25 °C referred to final frequency after 1 hour) | ≤ 5 min | |
| Output voltage / Load Option H : Option S : | HCMOS / 1 kOhm // 15 pF Sinewave / $\geq +3$ dBm / 50 Ohm | |
| Phase noise: 10 Hz: 100 Hz: 1 kHz: 10 kHz: | (typical for 10 MHz) -90 dBc / Hz -125 dBc / Hz -140 dBc / Hz -150 dBc / Hz | |
| Storage temperature range: | -45 °C ... +90 °C | |

| | | | | |
|----|-------------|----------|----------|---|
| 4 | | | | KVG Quartz Crystal Technology GmbH P.O.Box 61 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196 |
| 3 | | | | |
| 2 | | | | |
| 1 | | 24.08.07 | M. Zupan | |
| ED | Description | Date | Name | |

2. Environmental conditions

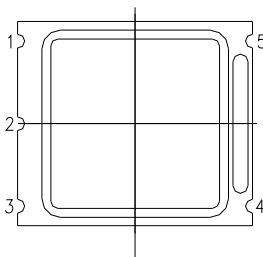
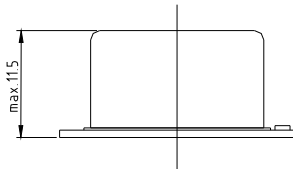
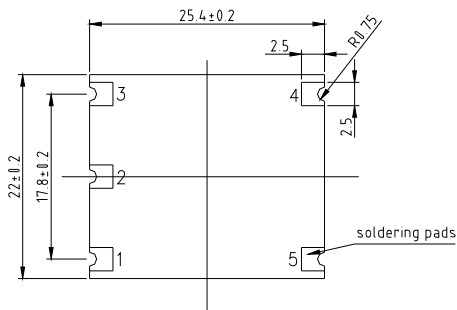
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

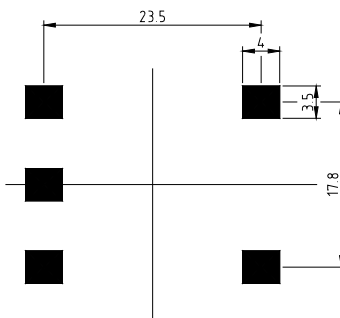
Manufacturer's name, date code (week/year); Specification; Center frequency

4. Case

BF144-11.5-SMD



Foot print
for PCB Design

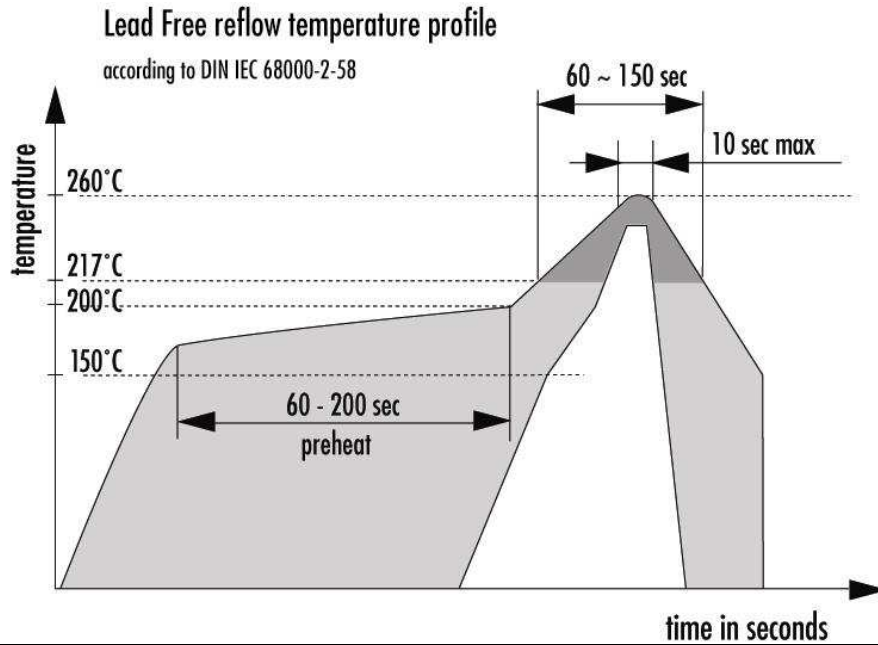


1. Pin configuration

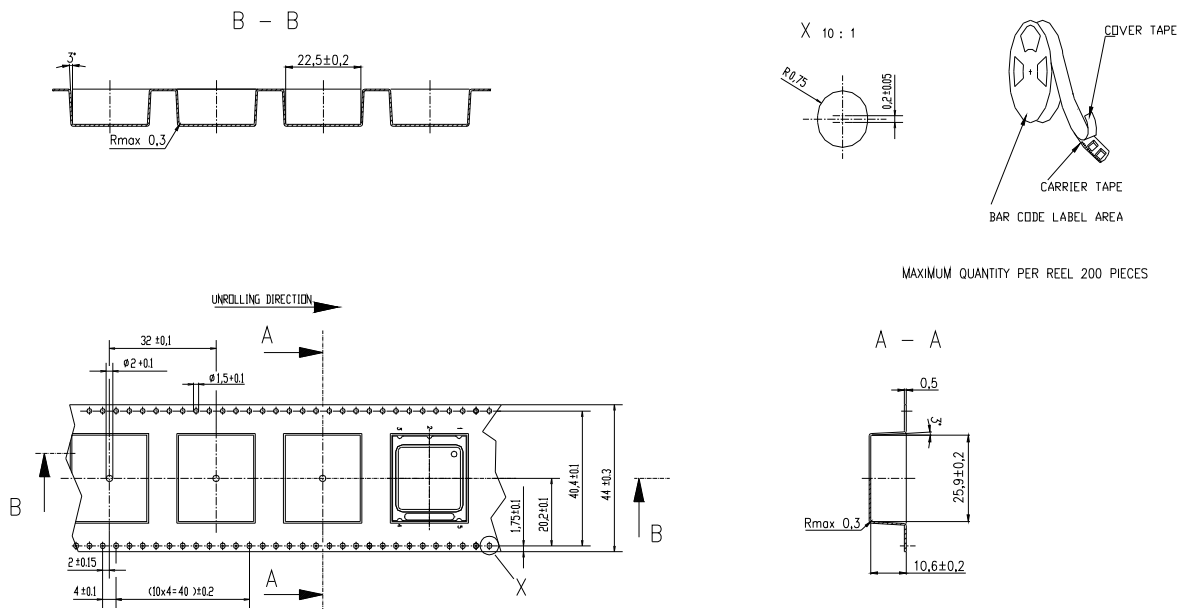
1. Control voltage V_C
2. Reference voltage output V_{REF}
3. Supply voltage V_S
4. RF-output
5. Ground, case

| | | | | |
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5. Recommended soldering profile



6. Tape and reel



max. pcs per tape: 150

| | | | | |
|----|-------------|----------|----------|------------------------------------|
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