



ROHS-Compliant Product

O-8000SC Series



| 1. Specification | | |
|--|---|------------------|
| Frequency range: | 10 ... 100 MHz | |
| Type: | O-8500SC | O-8300SC |
| Supply voltage V_S : | +5.0 V \pm 5 % | +3.3 V \pm 5 % |
| Frequency stability vs. temperature options: | | |
| $\leq \pm 1 \times 10^{-8}$ vs. 0 °C to +50 °C: | 855x | 835x |
| $\leq \pm 2 \times 10^{-8}$ vs. -10 °C to +60 °C: | 856x | 836x |
| $\leq \pm 3 \times 10^{-8}$ vs. 0 °C to +70 °C: | 857x | 837x |
| $\leq \pm 5 \times 10^{-8}$ vs. -20 °C to +70 °C: | 858x | 838x |
| $\leq \pm 1 \times 10^{-7}$ vs. -40 °C to +85 °C: | 859x | 839x |
| Aging stability option (after 30 days of operation) | | |
| $\leq \pm 5 \times 10^{-9}$ / day; $\leq \pm 5 \times 10^{-7}$ / year: | 85x1 | 83x1 |
| $\leq \pm 2 \times 10^{-9}$ / day; $\leq \pm 2 \times 10^{-7}$ / year: | 85x2 | 83x2 |
| Frequency stability vs. supply voltage changes $V_S \pm 5$ %: vs. load changes ± 5 %: | $\leq \pm 5.0 \times 10^{-9}$ $\leq \pm 2.0 \times 10^{-9}$ | |
| Frequency control by external tuning voltage: | $\geq \pm 1.5$ ppm | |
| Tuning voltage range: | +0.5 V to +4.5 V | +0.3 V to +3.0 V |
| Transfer function / Linearity: | Positive / ≤ 10 % | |
| Power consumption @ +25 °C steady state: during warm-up: | ≤ 1.0 W ≤ 3.0 W | |
| Warm-up time: (for a typical accuracy of $< \pm 5 \times 10^{-8}$ @ +25 °C referred to final frequency after 1 hour) | ≤ 5 min | |
| Output voltage / Load Option H: Option S: | (LV)HCMOS / 1 kOhm // 15 pF Sinewave / $> +3$ dBm / 50 Ohm | |
| Phase noise (typical for 10 MHz): 10 Hz: 100 Hz: 1 kHz: 10 kHz: | ≤ -95 dBc / Hz ≤ -130 dBc / Hz ≤ -145 dBc / Hz ≤ -150 dBc / Hz | |
| Storage temperature range: | -45 °C ... +90 °C | |

| | | | | |
|----|-------------|------------|---------|------------------------------------|
| 4 | | | | KVG Quartz Crystal Technology GmbH |
| 3 | | | | P.O. Box 61 |
| 2 | | | | D-74924 Neckarbischofsheim |
| 1 | | 23.08.2007 | Rudolph | Tel. +49 (0) 7263 / 648-0 |
| ED | Description | Date | Name | Fax. +49 (0) 7263 / 6196 |

2. Environmental conditions

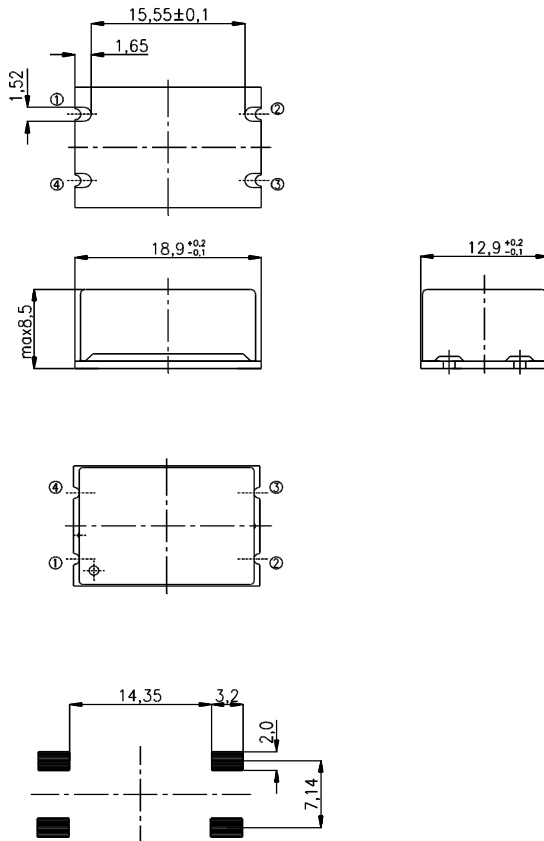
According to KVG Product Qualification Procedure AA-QM-200

3. Marking

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

4. Case

BF169-8.5-SMD



SMD-Lötflächen (Anwender)

1.Pin configuration

1. Control voltage V_C
2. Ground, case
3. RF-output
4. Supply voltage V_S

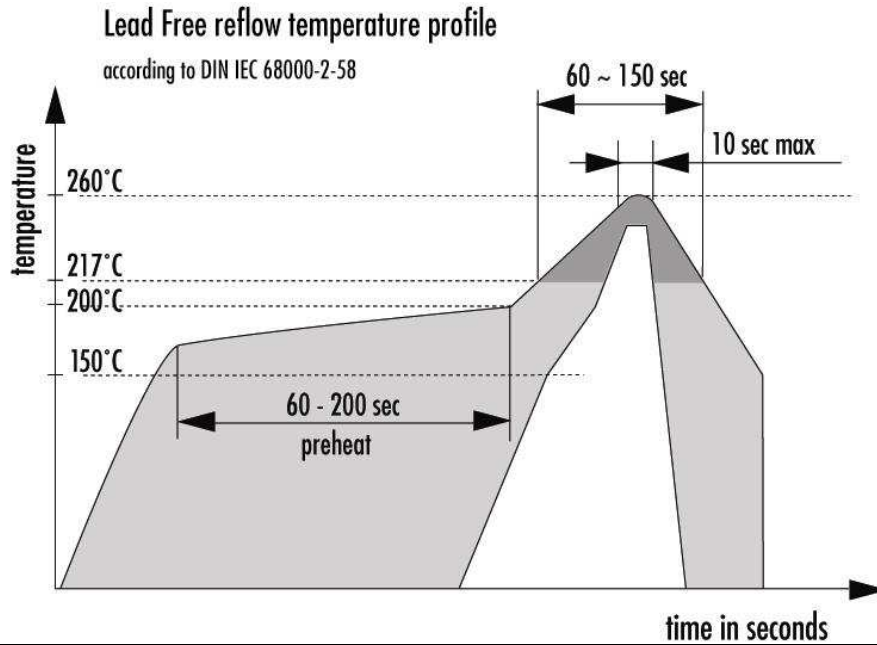
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5. Recommended soldering profile



6. Tape and reel

Drawing to be amended

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