



ROHS-Compliant Product

O-27000-SC-LF

1. Specification		Test conditions: $T_A = +25 \pm 3 \text{ }^{\circ}\text{C}$, $V_S = +12 \text{ V}$, $V_C = +5 \text{ V}$
Type:	O-27XYZ	
Frequency range:	5.0 MHz ... 20.0 MHz	
Initial tolerance (1 h after power ON):	$\leq \pm 5.0 \times 10^{-8}$	
Supply voltage V_S :	$+12.0 \text{ V} \pm 5\%$	
Temperature range options:	X	
0 °C to +50 °C :	1	
-10 °C to +60 °C :	2	
0 °C to +70 °C :	3	
-20 °C to +70 °C :	4	
Frequency stability options:	Y	
$\leq \pm 0.2 \text{ ppb}$:	1	
$\leq \pm 0.5 \text{ ppb}$:	2	
$\leq \pm 1.0 \text{ ppb}$:	3	
Long term stability (aging) options @ +25°C (after 30 days of continuous operation)	Z	
$< \pm 1 \times 10^{-10} / \text{day} < \pm 1 \times 10^{-8} / \text{year}$; $< \pm 1 \times 10^{-7} / 20 \text{ years}$:	1	
$< \pm 3 \times 10^{-10} / \text{day} < \pm 3 \times 10^{-8} / \text{year}$; $< \pm 3 \times 10^{-7} / 20 \text{ years}$:	2	
Power Consumption during warm-up ($T_A = 0 \text{ }^{\circ}\text{C}$): at steady state ($T_A = +25 \text{ }^{\circ}\text{C}$):	$\leq 8.0 \text{ W}$ $\leq 2.5 \text{ W}$	
Frequency stability vs. supply voltage changes $V_S \pm 5 \%$: vs. load changes $R_L = 50 \pm 5 \text{ } \Omega$:	$\leq \pm 2.5 \times 10^{-10}$ $\leq \pm 2.5 \times 10^{-10}$	
Frequency drift in hold over mode during one day: ($T_A = \pm 3 \text{ }^{\circ}\text{C}$ within $+20 \dots +70 \text{ }^{\circ}\text{C}$)	$\leq 5.0 \times 10^{-10}$	
Short term stability (Allan Deviation) for $\tau = 0.2 \dots 10 \text{ s}$	$\leq 1.0 \times 10^{-11}$	
Output signal type: level: load:	Sine wave $220 \pm 50 \text{ mV}$ 50 Ohm	
Phase noise (typical for 5MHz): 1 Hz: 10 Hz: 100 Hz: 1 kHz:	$\leq -100 \text{ dBc/Hz}$ $\leq -130 \text{ dBc/Hz}$ $\leq -145 \text{ dBc/Hz}$ $\leq -150 \text{ dBc/Hz}$	
Spurious: Harmonics:	$\leq -70 \text{ dBc}$ $\leq -25 \text{ dBc}$	

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O-27000-SC-LF**1. Specification continued**

Start-up time (for $V_{out} > 90\%$ of final value):	$\leq 1 \text{ min}$
Warm-up time @ +25 °C: (for $\Delta f/f < 1 \times 10^{-8}$ referred to final frequency after 1 hours)	$\leq 10 \text{ min.}$
Retrace @ +25 °C after max. 24 h OFF and 1 h ON:	$\leq \pm 1.0 \times 10^{-8}$
Frequency control range (initial, referred to f_0)	$\geq \pm 0.35 \text{ ppm}$
Control voltage range V_C :	0 V to +10 V
Input impedance:	$\geq 10 \text{ k}\Omega$
Pulling slope dF/dV_C / Linearity:	positive / $\leq 10\%$
Storage Temperature range	-40 °C ... +85 °C

2. Environmental conditions

According to KVG Product Qualification Procedure AA-QM-200

3. Marking

Manufacturer's name, date code (week/year)
Nominal frequency
Serial number
Pb-free logo

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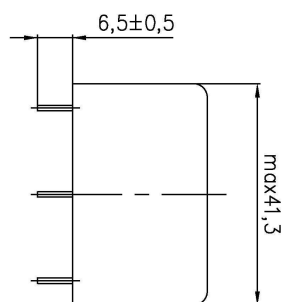
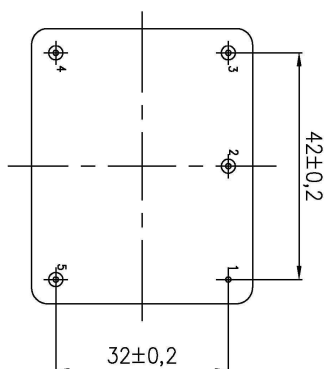
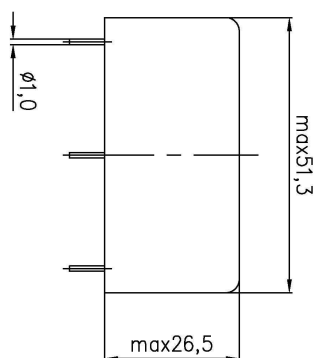
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4. Case

Case style: BF138



all dimensions in mm

1. Pin configuration

1. GND, case
2. Control Voltage V_C
3. N.C.
4. Supply voltage V_S
5. RF output

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