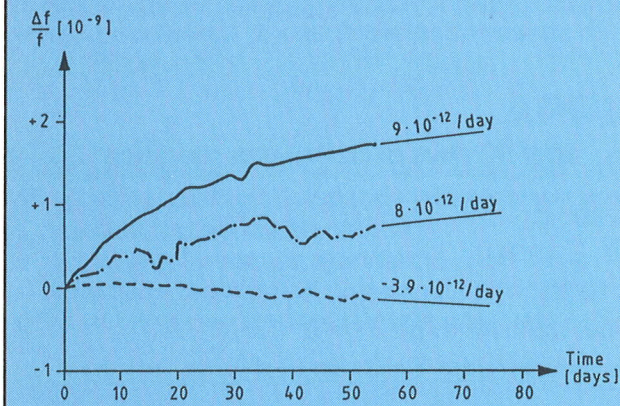
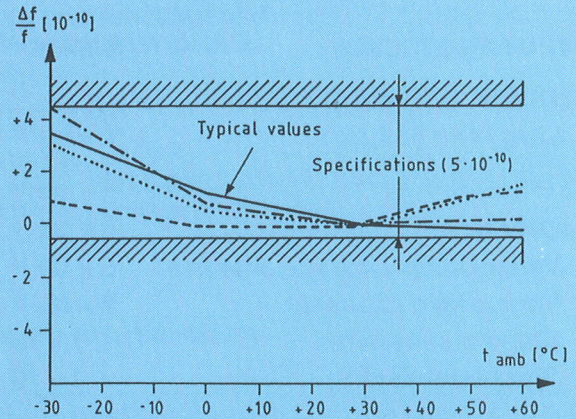


TECHNICAL INFORMATIONS

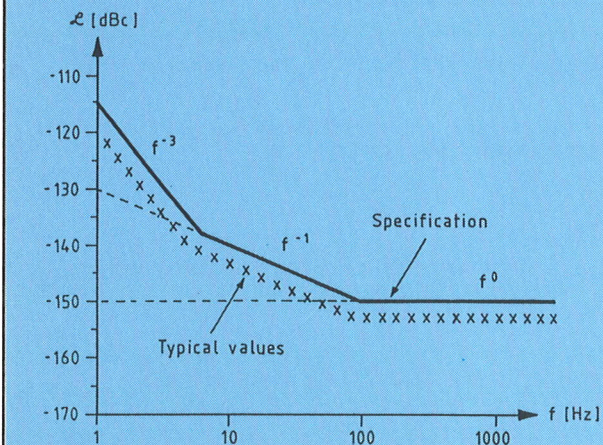
INITIAL AGING



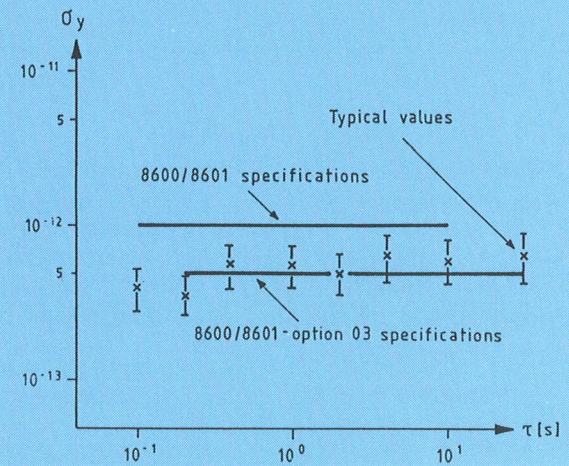
FREQUENCY vs TEMPERATURE



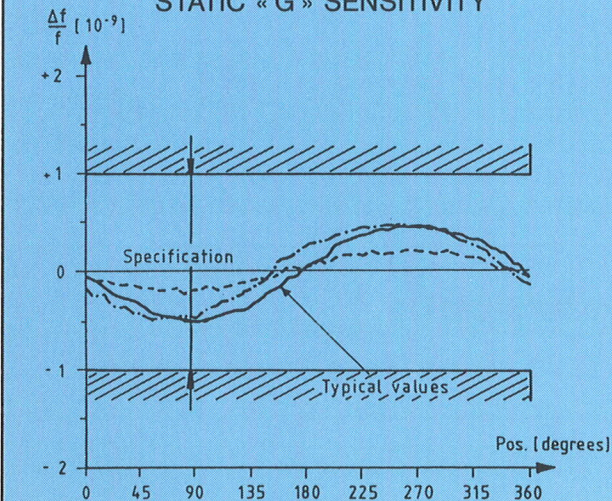
SBB PHASE NOISE (BANDWIDTH 1 Hz)



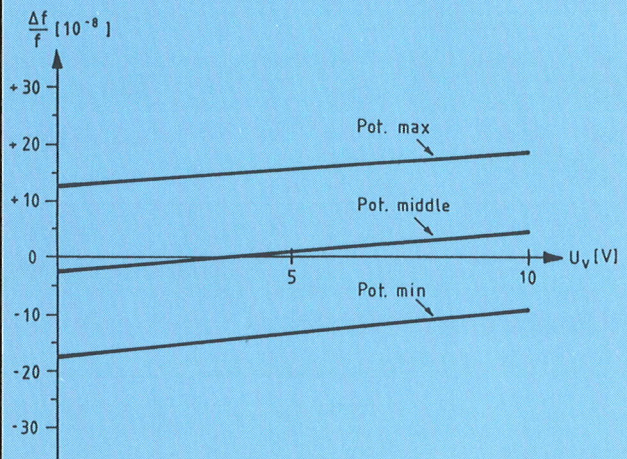
SHORT-TERM STABILITY (ALLAN VARIANCE)



STATIC « G » SENSITIVITY



ELECTRICAL FREQUENCY PULLING RANGE



TECHNICAL SPECIFICATIONS

unless otherwise noted, at 25 ° C and 24 V DC

MODELS 8600 / 8601

OUTPUT FREQUENCY : 5 MHz

FREQUENCY STABILITY

Long-term (ageing) : 2×10^{-11} / day
 5×10^{-10} / month
 5×10^{-9} / year } after 90 days of continuous operation

Over temperature range : 5×10^{-10} (-30 to +60 ° C)

Versus supply voltage changes : 5×10^{-11} (+24 VDC \pm 10 %)

Versus load changes : 2×10^{-11} (50 Ω \pm 10 %)

Static g-sensitivity : $< 1 \times 10^{-9}$ / g (typically 5×10^{-10} / g)

Short-term σ (τ) : $\leq 1 \times 10^{-12}$ (typical 5×10^{-13}) for $\tau = 0.1$ to 10 s

Phase noise spectral density : see drawing below

WARM-UP

at 25 ° C ambient temperature
and with +24 VDC : $\sim 1 \times 10^{-8}$, 120 min. after switch-on

FREQUENCY ADJUSTMENT, coarse : by externally accessible 22 turns built-in potentiometer, range $\geq 2 \times 10^{-7}$ with external control voltage of 4 V

fine : by external control voltage of 0 to +10 VDC, range $> 4 \times 10^{-8}$ with built-in potentiometer centered for nominal frequency at 4 V

POWER SUPPLY REQUIREMENTS

Input voltage : +24 VDC \pm 10 % (operating 20 to 32 V)

Power consumption : 11 W during warm-up
4.5 W after warm-up

OUTPUT CHARACTERISTICS : 2 outputs with each 0.5 V_{RMS} into 50 Ω (short-circuit protected)

Wave form : sine

Source impedance : 50 Ω

Harmonic distortion : harmonics suppressed by more than 40 dB (typ. 50 dB)

ENVIRONMENTAL

Operating temperature range : -30 to +60 ° C

Storage temperature range : -30 to +85 ° C

Vibration : 1.5 to 0.5 mm p-p 8 to 50 Hz (MIL STD 167-1)

Shocks : according to
- IEC 68-2-27 or to
- NFC 20-608 severity 30A
(30 G / 11 ms, 3 shocks in each direction of the main axis)

WEIGHT : 850 g

SIZE : see drawings

MODELS 8600 / 8601 OPTION 03

Same specifications as for models 8600 and 8601, except for short-term stability

$$\sigma_{\tau} = \leq 5 \times 10^{-13} \text{ for } \tau \text{ of } 0.2 \text{ to } 30 \text{ s}$$