

● FEATURES

- STABILITY TO ± 0.01 PPM
- LOW AGING CHARACTERISTICS
- LOW PHASE NOISE

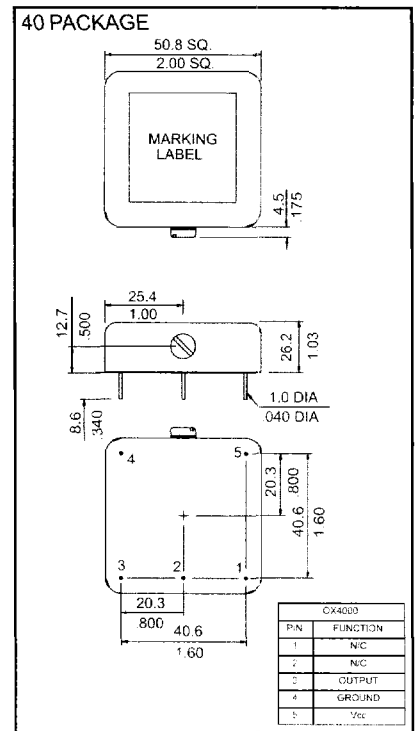
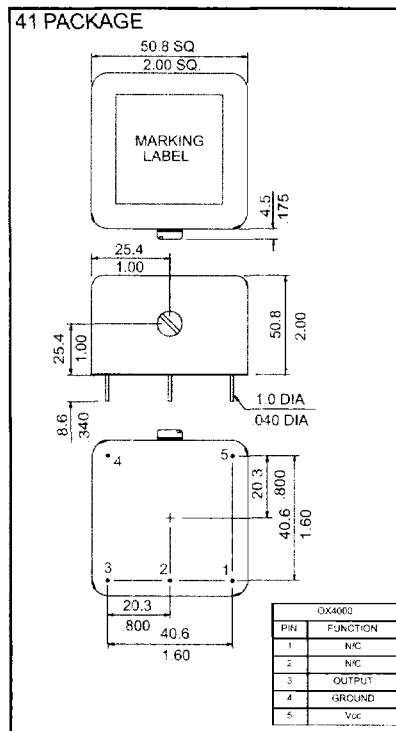
● SPECIFICATIONS

FREQUENCY RANGE	5.00 MHz TO 100.00 MHz
FREQUENCY STABILITY VS. OPERATING TEMPERATURE	± 0.1 PPM OVER -20°C TO $+70^{\circ}\text{C}$ (AT-CUT) ± 0.01 PPM OVER -20°C TO $+70^{\circ}\text{C}$ (SC-CUT) (OTHER STABILITIES TEMPERATURE ARE AVAILABLE)
FREQUENCY STABILITY VS. AGING	± 1.0 PPB PER DAY AND ± 0.15 PPM FIRST YEAR TYPICAL (AT-CUT) ± 0.3 PPB PER DAY AND ± 0.05 PPM FIRST YEAR TYPICAL (SC-CUT)
OUTPUT WAVEFORM	SEE TABLE 1
LOAD	SEE TABLE 1
FREQUENCY STABILITY VS. LOAD VARIATION	± 0.01 PPM FOR $\pm 10\%$ VARIATION
SUPPLY VOLTAGE	$+12.0$ VDC $\pm 5\%$
FREQUENCY STABILITY VS. SUPPLY VARIATION	± 0.001 PPM FOR $\pm 5\%$ VARIATION
POWER CONSUMPTION	5.0 WATTS MAX FOR WARM-UP 2.0 WATTS MAX AT STEADY STATE
FREQUENCY ADJUSTMENT RANGE	± 5.0 PPM TYPICAL (AT-CUT) ± 1.0 PPM TYPICAL (SC-CUT)
CONTROL VOLTAGE RANGE	0 TO 10.0 +VDC
SLOPE	POSITIVE
LINEARITY	$\pm 10\%$
REFERENCE VOLTAGE	$+6.2$ VDC OPTIONAL REFERENCE
STORAGE TEMPERATURE RANGE	-40°C TO $+85^{\circ}\text{C}$

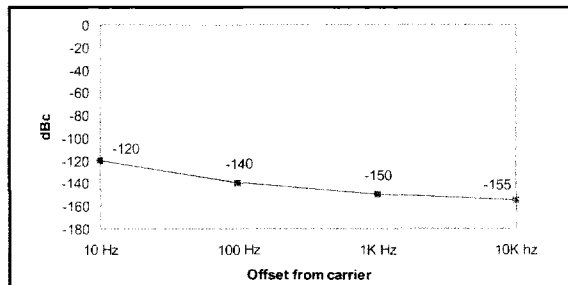
● OUTPUT AND LOAD CHARACTERISTICS

TABLE 1		
OUTPUT TYPE	LOAD	RALTRON CODE
CLIPPED SINE	10K//20 pF	0
TTL	3/5/10 GATES	1
HC MOS	3/5/10 GATES	2
AC MOS	3/5/10 GATES	3
100K ECL	50 OHMS	5
SINEWAVE	50 OHMS	6
10K ECL	50 OHMS	7
PECL	50 OHMS	8
CUSTOM	TBD	9

● OUTLINE DRAWING



● PHASE NOISE CHARACTERISTICS



TYPICAL PHASE NOISE FOR HCMOS OUTPUT
SINEWAVE OUTPUT IS -5 dBc/Hz BETTER

● PART NUMBERING SYSTEM

TYPE	OUTPUT TYPE	CRYSTAL CUT	PACKAGE TYPE	REVISION LEVEL	TEMPERATURE RANGE	FREQUENCY STABILITY	FREQUENCY
OX	TABLE 1 CODE	1: AT CUT 2: SC CUT	40 41	RALTRON ASSIGNED	HZ: -20°C TO $+70^{\circ}\text{C}$	10: 0.1 PPM 1: 0.01 PPM	IN MHZ

EXAMPLE: OX2140A-HZ-1-10.000