

### FEATURES

- STABILITY TO  $\pm 0.01$  PPM
- LOW AGING CHARACTERISTICS
- LOW PHASE NOISE

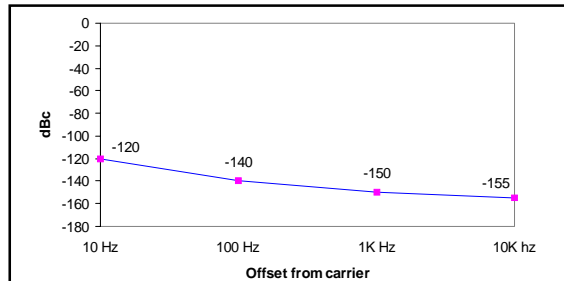
### SPECIFICATIONS

FREQUENCY RANGE	5.00 MHz TO 100.00 MHz
FREQUENCY STABILITY VS. OPERATING TEMPERATURE	$\pm 0.1$ PPM OVER $-20^{\circ}\text{C}$ TO $+70^{\circ}\text{C}$ (AT-CUT) TYPICAL $\pm 0.02$ PPM OVER $-20^{\circ}\text{C}$ TO $+70^{\circ}\text{C}$ (SC-CUT) TYPICAL (OTHER STABILITIES TEMPERATURE ARE AVAILABLE)
FREQUENCY STABILITY VS. AGING	$\pm 1.0$ PPB PER DAY AND $\pm 0.1$ PPM PER YEAR TYPICAL (AT-CUT) $\pm 0.3$ PPB PER DAY AND $\pm 0.05$ PPM PER YEAR TYPICAL (SC-CUT)
OUTPUT WAVEFORM	SEE TABLE 1
LOAD	SEE TABLE 1
FREQUENCY STABILITY VS. LOAD VARIATION	$\pm 0.02$ PPM FOR $\pm 10\%$ VARIATION (AT-CUT) $\pm 0.01$ PPM FOR $\pm 10\%$ VARIATION (SC-CUT)
SUPPLY VOLTAGE	$+12.0$ VDC $\pm 5\%$ (VCC) OR $+5.0$ VDC $\pm 5\%$ (VDD) ( $-5.2$ VDC FOR ECL)
FREQUENCY STABILITY VS. SUPPLY VARIATION	$\pm 0.1$ PPM FOR $\pm 5\%$ VARIATION (AT-CUT) $\pm 0.05$ PPM FOR $\pm 5\%$ VARIATION (SC-CUT)
POWER CONSUMPTION	5.0 WATTS MAX FOR WARM-UP 2.0 WATTS MAX AT STEADY STATE
FREQUENCY ADJUSTMENT RANGE	$\pm 5.0$ PPM TYPICAL (AT-CUT) $\pm 1.0$ PPM TYPICAL (SC-CUT)
CONTROL VOLTAGE RANGE	0 TO 6.0 +VDC
SLOPE	POSITIVE
LINEARITY	$\pm 10\%$
STORAGE TEMPERATURE RANGE	$-40^{\circ}\text{C}$ 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
HCMOS	3/5/10 GATES	2
ACMOS	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

### 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	94	RALTRON ASSIGNED	HZ: $-20^{\circ}\text{C}$ TO $+70^{\circ}\text{C}$	10: 0.1 PPM 2: 0.02 PPM	IN MHZ

EXAMPLE: OX1294A-HZ-10-50.000

### OUTLINE DRAWING

