



PIN CONNECTION	
PIN 1:	NO CONNECTION
PIN 4:	GROUND
PIN 5:	OUTPUT
PIN 8:	V _{DD} SUPPLY VOLTAGE

MODEL	QLFO-1000		
PARAMETER	MIN.	TYP.	MAX.
CURRENT CONSUMPTION (uA)		45	
OUTPUT VOLTAGE HIGH (V _{OH})	4.8	4.9	
OUTPUT VOLTAGE LOW (V _{OL})		0.05	0.2
OUTPUT CURRENT SOURCE (V _{OL})		1.0	
OUTPUT CURRENT SINK (I _{OL})		1.0	
RISE TIME (tr), FALL TIME (tf)		0.5ns	1.0ns
SUPPLY CURRENT (I _{DD})		50	60
DUTY CYCLE	40	50	60
START - UP TIME (ts)			2

SPECIFICATION	
NOMINAL FREQUENCY	32.768 kHz (Refer Note 1)
SUPPLY VOLTAGE (V _{DD})	5V D.C. ±10% Standard
	3.0V ~ 15V D.C.
SUPPLY CURRENT	45µA
FREQUENCY TOLERANCE AT 25°C	2025 ±25ppm (±0.0025%)
	2050 ±50ppm (±0.005%)
	2100 ±100ppm (±0.01%)
FREQUENCY STABILITY	±50ppm Maximum 0°C to +50°C
	±100ppm Maximum -40°C to +85°C
TEMPERATURE COEFFICIENT	-0.035ppm/°C ²
OPERATING TEMPERATURE	-40°C to +85°C
STORAGE TEMPERATURE	-55°C to +125°C
AGING AT 25°C	±1ppm/Year Typical ±3ppm/Year Maximum
SHOCK: 1000G's, 0.35 msec, 1/8 sine	±3ppm Maximum
VIBRATION: 10G's, 10 - 2000Hz	±3ppm Maximum

NOTE 1: ABOVE PARAMETERS ARE FOR STANDARD OSCILLATOR UNITS.
OUR SALES OFFICE SHOULD BE CONTACTED FOR SPECIAL REQUIREMENTS.