

Technical Data

NCT Series



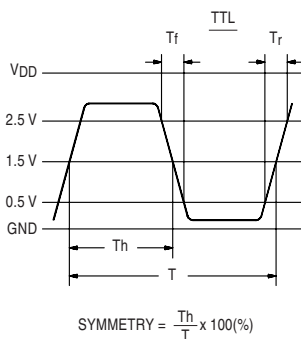
Description

A crystal controlled, hybrid oscillator circuit that produces a true TTL output characteristic at frequencies between 500 kHz and 66.6667 MHz. The device is mounted in a 14-pin DIP-compatible, all metal hermetic package. Physically and functionally interchangeable with all major manufacturers' devices.

Applications & Features

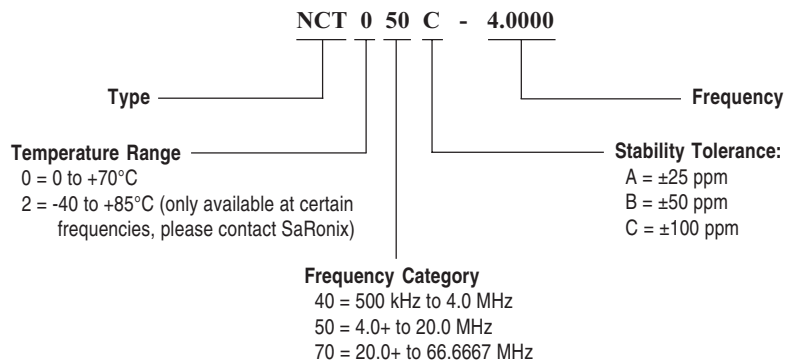
- Ideal for high performance RISC and CISC based products
- True TTL level for low EMI
- Broad frequency range to 66.6667 MHz

Output Waveform



Frequency Range:	500 kHz to 66.6667 MHz	
Frequency Stability:	±25, ±50 or ±100 ppm over all conditions: calibration tolerance, operating temperature, input voltage change, load change, aging, shock and vibration.	
Temperature Range:	Operating: 0°C to +70°C or -40 to +85°C (limited frequencies) Storage: -55°C to +125°C	
Supply Voltage:	+5 VDC ±10%	
Supply Current:	Max @ 25°C	Max over Temperature
500 kHz to 20 MHz:	30mA	40mA
20+ to 66.6667 MHz:	65mA	70mA
TTL Output:	Symmetry: 40/60% max @ 1.5 VDC level Rise & Fall Times: 8ns max: 500 kHz to 25 MHz 6ns max: 25+ to 66.6667 MHz 0 Level: 0.5V max 1 Level: 2.5V min Load: 1 to 10 TTL gates (1.6mA per gate)	
Mechanical:	Shock: MIL-STD-883, Method 2002, Condition B Solderability: MIL-STD-883, Method 2003 Terminal Strength: MIL-STD-883, Method 2004, Condition B2 Vibration: MIL-STD-883, Method 2007, Condition A Solvent Resistance: MIL-STD-202, Method 215 Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition A, B or C	
Environmental:	Gross Leak Test: MIL-STD-883, Method 1014, Condition C Fine Leak Test: MIL-STD-883, Method 1014, Condition A Thermal Shock: MIL-STD-883, Method 1011, Condition A Moisture Resistance: MIL-STD-883, Method 1004	

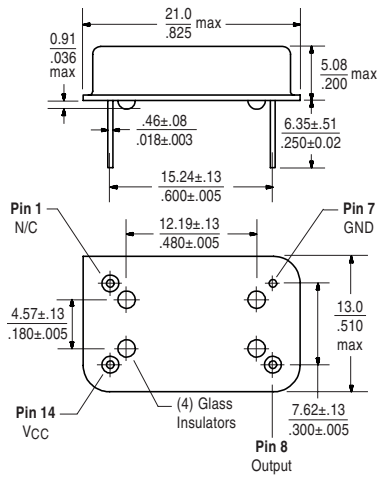
Part Numbering Guide:



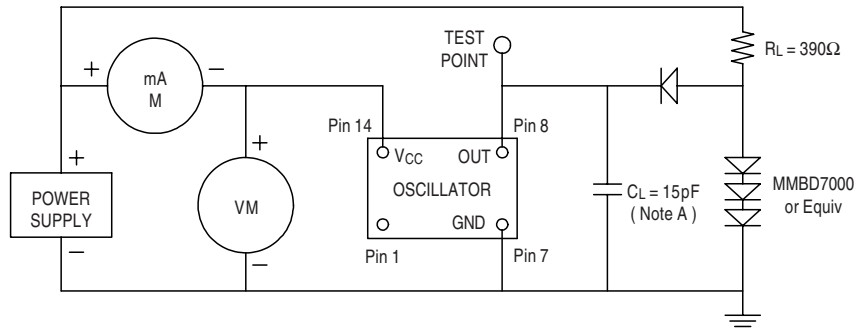
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Package Details



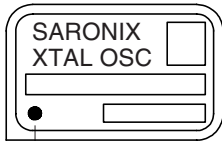
Test Circuit



NOTE A: C_L Includes probe and fixture capacitance

Standard Marking Format *

Includes Date Code, Frequency & Part Number



Denotes Pin 1

* Exact locations of items may vary

Scale: None (Dimensions in $\frac{\text{mm}}{\text{inches}}$)

All specifications are subject to change without notice.

DS-129 REV E