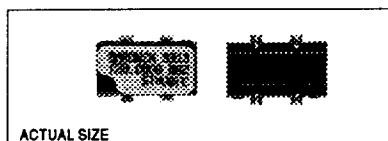
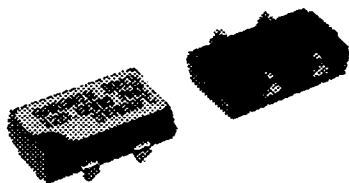


Technical Data

STA Series, Type F



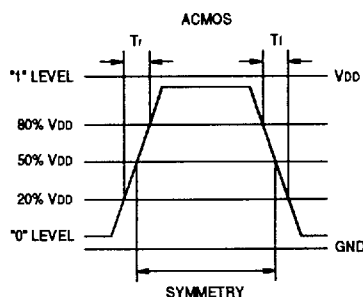
Description

A crystal controlled, 3.3V oscillator to drive HCMOS and NMOS microprocessors. This AC MOS device is capable of driving HCMOS loads at high frequencies. The tri-state function enables the output to go high impedance. The surface mountable J-leaded plastic package is ideal for automated assembly.

Applications & Features

- Ideally suited for high speed graphics, CISC and RISC processors, and custom ASIC's operating at 3.3 Volts
- 3.3V operation to 110 MHz
- Compact Surface Mountable package
- Matches EIA standard SO-J-20 footprint
- AC MOS and HCMOS compatible
- Tri-state output
- Output is short-circuit protected
- Also available as a 5V version

Output Waveform



Frequency Range:	50 MHz to 110 MHz	
Frequency Stability:	±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 (extended temperature range available)	
Storage:	-55°C to +125°C	
Supply Voltage:		
Operating:	3.3V ±10%	
Absolute Maximum:	+7 VDC	
Supply Current:	typical mA	maximum mA
to 80 MHz, 3.3V:	25	35
80 - 110 MHz, 3.3V:	30	45

Output Drive:

AC MOS

Symmetry:	@ 0.5 VDD, see Part Numbering Guide on Page 2
Rise & Fall Times:	20% to 80% VDD, see Part Numbering Guide
Logic 0:	10% VDD max
Logic 1:	90% VDD min
Output Load:	50Ω AC load

Mechanical:

Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Terminal Strength:	MIL-STD-202, Method 211, Conditions A and C
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 B

Environmental:

Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

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Technical Data

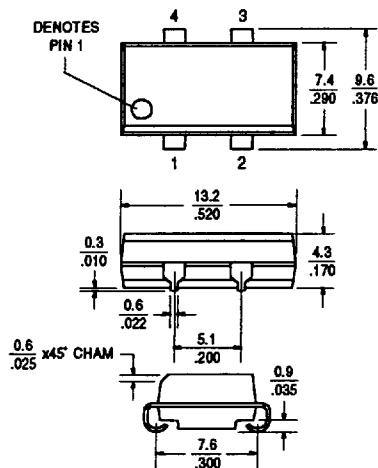
STA Series, Type F

Tri-State Logic Table

Pin 1 Input	Pin 3 Output
Logic "1" or NC	Oscillation
Logic "0" or GND	High Impedance

Required Input Levels on Pin 1:
Logic "1" = 2.5V min
Logic "0" = 0.6V max

Package Details

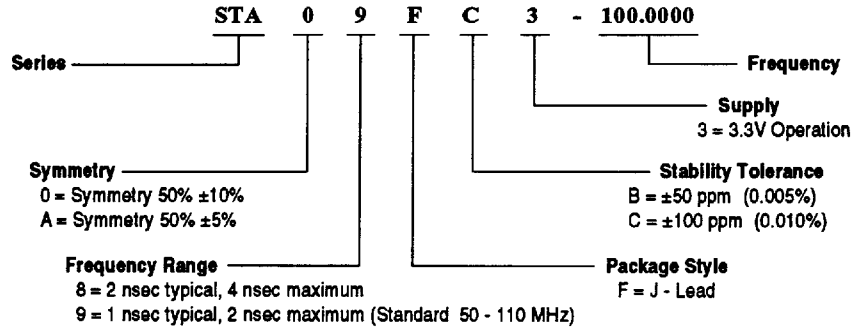


Pin Function:
Pin 1: Tri-State Control Pin 3: Output
Pin 2: GND Pin 4: 3.3V D.C.

Standard Marking Format

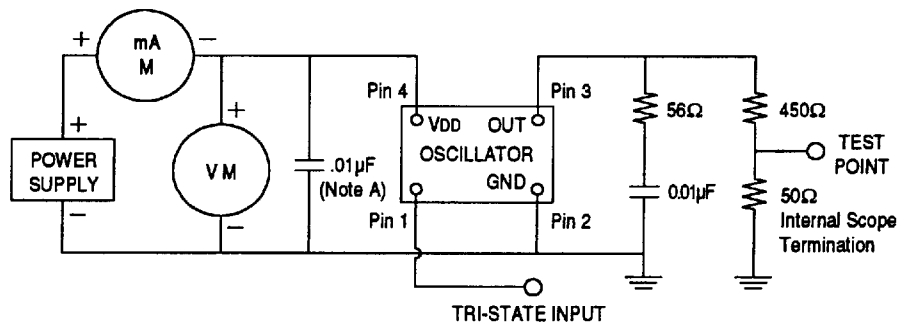


Part Numbering Guide



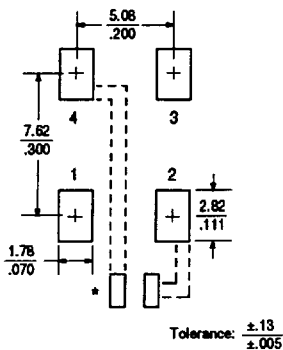
Example P/N: STA08FC3 - 80.0000

Test Circuit



NOTE: A. An external .01µF bypass capacitor close to package ground and VDD pin is recommended.

Recommended Land Pattern



* External high frequency power supply decoupling recommended.

Scale: None (Dimensions in mm inches)

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All specifications are subject to change without notice.

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