

FREQUENCY STABILITY

OVER:

OPERATING TEMP. RANGE: See note 1

OVERALL STABILITY: $< \pm 100\text{ppm}^*$

INCLUDING:

- OVER OPERATING TEMPERATURE RANGE
- ADJUSTMENT @ 25°C
- LONG TERM AGING (10 YEARS)
- STABILITY OVER SUPPLY VOLTAGE $\pm 5\%$
- STABILITY OVER LOAD (MIN. TO MAX.)

POWER SUPPLY

SUPPLY VOLTAGE: $V_{dd} = 3.3V \pm 5\%^*$

INPUT CURRENT: $< 30\text{mA}^*$

OUTPUT

OUTPUT SIGNAL: AC-MOS compatible *

SYMMETRY: 40 / 60% (min.) @ $V_{dd} / 2^*$

RISE & FALL TIME: $t_r < 3\text{ns}$ $t_f < 3\text{ns}^*$

LEVEL "0" & "1": $< 0.4V$ $> V_{dd} - 0.5V$

START-UP TIME: $< 5\text{ms}$

FAN OUT (LOAD): 10 TTL / LS *

JITTER: $< 1\text{ps}$

ENVIRONMENT

OPERABLE TEMP. RANGE: -55 to $+125^\circ\text{C}$

STORAGE TEMP. RANGE: -65 to $+125^\circ\text{C}$

VIBRATIONS: 10 to 2000Hz / 10g

SHOCKS: 5000g, 0.3ms, $\frac{1}{2}$ sine

PACKAGE: Ceramic

PACKAGE DIMENSIONS: 14.1 x 9.3 x 2.4mm

(see packaging info)

PROCESSING: Reflow soldering 260°C / 10s max.
(see packaging info)

MISCELLANEOUS

* Customer's specification on request

Note 1: Operating Temperature Range

MCSOFV-A: 0 to $+70^\circ\text{C}$

MCSOFV-B: -40 to $+85^\circ\text{C}$

MCSOFV-C: -55 to $+125^\circ\text{C}$

Option 1: Enable / Disable (on request)

See application circuit on page 2 for details

Pin 1: Pin 3 (Fout)::

Open Clock

H Clock

L High Z

Option 2: J / Leads (on request)

With tinned J / Leads pins

Height: 3.8mm included J / Leads

Marking Example



MCSOFV-B

E/D

160.000 MHz

05.44

O



Type

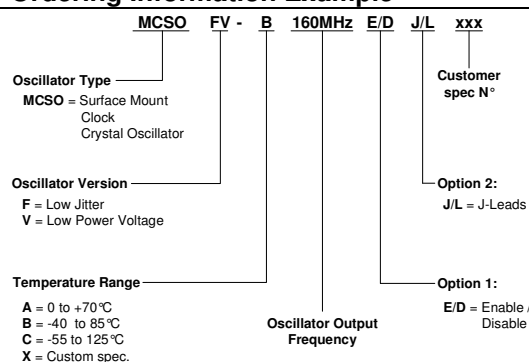
Option 1

Frequency

Date Code

O (PIN 1)

Ordering Information Example



STANDARD FREQUENCIES [MHz]

Preliminary

Date : June 2003 Revision No. : 3 Revision Date : 11-05

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In accordance with our policy of continuous development and improvement,
we reserve the right to modify the design or the specifications of our products without prior notice.

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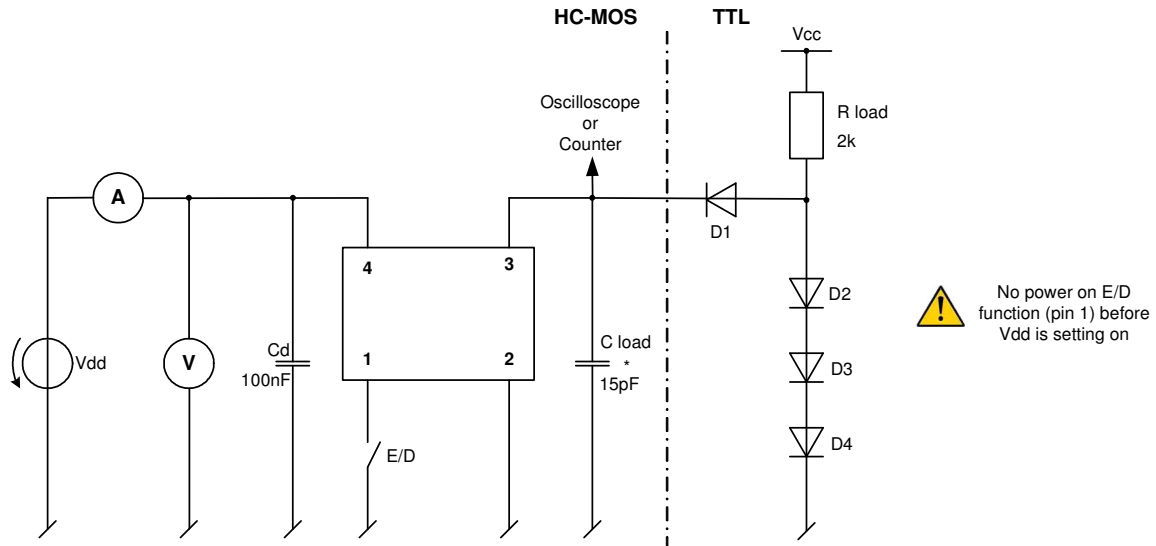
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www.microcrystal.ch

Email

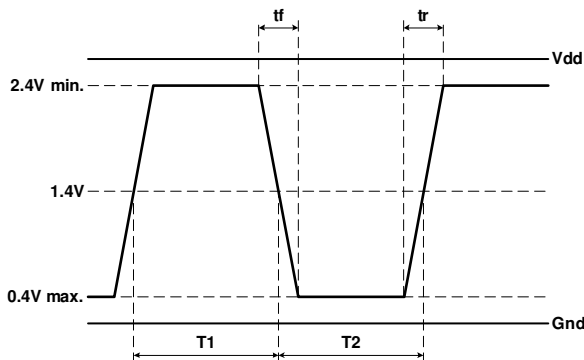
sales@microcrystal.ch

Application and Test Circuit:

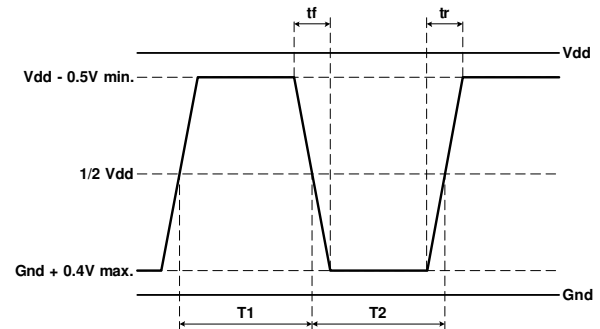


Waveform Output:

Waveshape TTL



Waveshape HC-MOS



$$\text{Duty Cycle} = 100 \times \frac{T1}{T1 + T2} [\%]$$

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