MCSO1F Miniature SMD Clock-Oscillator

MICRO CRYSTAL SWITZERLAND

Overall stability ± 100ppm
5V Power Supply
40 to 160MHz

FREQUENCY STABILITY

OVER:

OPERATING TEMP. RANGE: *See note 1*

OVERALL STABILITY: *< ±100ppm *

INCLUDING:
- OVER OPERATING TEMPERATURE RANGE
- ADJUSTMENT @ 25°C
- LONG TERM AGING (10 YEARS)
- STABILITY OVER SUPPLY VOLTAGE ±10%
- STABILITY OVER LOAD (MIN. TO MAX.)

POWER SUPPLY

SUPPLY VOLTAGE: *Vdd = 5V ±10% **

INPUT CURRENT: *< 50mA**

OUTPUT

OUTPUT SIGNAL: *AC-MOS compatible ***

SYMMETRY: *40 / 60% (min.) @ Vdd / 2 ***

RISE & FALL TIME: *tr < 3ns   tf < 3ns ***

LEVEL "0" & "1": *< 0.4V   > Vdd − 0.5V*

START-UP TIME: *< 5ms*

FAN OUT (LOAD): *10 TTL / LS ***

JITTER: *< 1ps*

ENVIRONMENT

OPERABLE TEMP. RANGE: *-55 to +125°C*

STORAGE TEMP. RANGE: *-65 to +125°C*

VIBRATIONS: *10 to 2000Hz / 10g*

SHOCKS: *5000g, 0.3ms, ½ sine*

PACKAGE: *Ceramic*

PACKAGE DIMENSIONS: *8.0 x 3.7 x 2.0mm*
(see packaging info)

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

MISCELLANEOUS

* *Customer's specification on request*
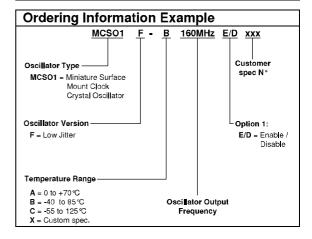
Note 1: Operating Temperature Range

MCSO1F-A:	*0 to +70 °C*
MCSO1F-B:	*-40 to +85 °C*
MCSO1F-C:	*-55 to +125 °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

Marking Example

Micro Crystal	**Micro Crystal**
MCSO1F-B E/D	*Type Option 1*
160.000 MHz 09.40	*Frequency Date Code*
O	O *(PIN 1)*

Ordering Information Example

MCSO1   F - B   160MHz   E/D   xxx

Oscillator Type

MCSO1 = Miniature Surface
Mount Clock
Crystal Oscillator

Oscillator Version

F = Low Jitter

Temperature Range

A = 0 to +70°C
B = -40 to 85°C
C = -55 to 125°C
X = Custom spec.

**Oscillator Output
Frequency**

Option 1:
E/D = Enable /
Disable

**Customer
spec N°**

STANDARD FREQUENCIES [MHz]