

Up to 20MHz

## FREQUENCY STABILITY

OVER:

**OPERATING TEMP. RANGE:** See note 1 **OVERALL STABILITY:** < ±100ppm \*

INCLUDING:

**OVER OPERATING TEMPERATURE RANGE** 

ADJUSTMENT @ 25 ℃

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:** < 15mA\*

**OUTPUT** 

**OUTPUT SIGNAL:** HC-MOS compatible \* SYMMETRY: 40 / 60% (min.) @ Vdd / 2\* **RISE & FALL TIME:** tr < 7ns tf < 7ns \* < 0.4V > Vdd - 0.5V LEVEL "0" & "1":

START-UP TIME: < 5ms FAN OUT (LOAD): 10 TTL / LS \*

**ENVIRONMENT** 

**OPERABLE TEMP. RANGE:** -55 to +125 ℃ STORAGE TEMP. RANGE: -65 to +125 ℃ VIBRATIONS: 10 to 2000Hz / 10g SHOCKS: 5000g, 0.3ms, 1/2 sine PACKAGE: Ceramic

**PACKAGE DIMENSIONS:** 14.1 x 9.3 x 2.4mm

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

(see packaging info)

### **MISCELLANEOUS**

Customer's specification on request

### Note 1: Operating Temperature Range

MCSO-A: 0 to +70 ℃ MCSO-B: -40 to +85 ℃ -55 to +125 ℃ MCSO-C:

### Option 1: Enable / Disable (on request) See application circuit on page 2 for details Pin 3 (Fout):: Open Clock Н Clock

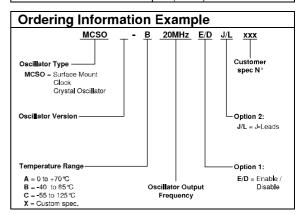
High Z

Not available for f < 500kHz

# Option 2: J / Leads (on request)

With tinned J / Leads pins Height: 3.8mm included J / Leads

#### Marking Example Micro Crystal Micro Crystal Option 1 MCSO-B E/D Type 20.000 MHz Date Code 09.42 Frequency 0 O (PIN 1)



STANDARD FREQUENCIES [MHz]					
10.0000	10.1500	10.2300	10.2400	11.0592	12.0000
12.2880	12.8000	13.0000	14.7456	16.0000	16.3 <b>84</b> 0
18.4320	19.2000	19.6608	20.0000		& sub multiple

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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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