## STANDARD PRODUCTS QUOTE / ORDER FORM

### To order standard products listed on pages 6-44 of this catalog:

Please photocopy this page and fill out the information requested below. It is important to fill this out completely so that **FREQUENCY MANAGEMENT INTERNATIONAL** can promptly respond to your request. Where possible, please identify the **FREQUENCY MANAGEMENT INTERNATIONAL** part number as listed in this catalog.

FAX the information to: (714) 373-8700

As a U.S. based manufacturer, **FREQUENCY MANAGEMENT INTERNATIONAL** is fully capable of providing "Custom" **Products** built to *your* specifications. For these requirements, please refer to the section herein entitled: "How to Order Custom Products", pages 53-56.

| Address: _<br>_<br>_ | FAX                     | :<br>::      |                 |
|----------------------|-------------------------|--------------|-----------------|
| Quantity             | Part Number/Description | Target Price | Target Delivery |
|                      |                         |              |                 |
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# CUSTOM CRYSTALS QUOTE / ORDER FORM

#### To order custom crystals built to your specifications:

Please photocopy this page and fill out the information requested below. It is important to fill this out completely so that **FREQUENCY MANAGEMENT INTERNATIONAL** can promptly respond to your request. Not all combinations of parameters are feasible. Our technical staff will review each custom request and assist with any modifications necessary to meet your requirement.

| Company:                               | Date:   |
|--|---|
| Address:                               |   |
|  | FAX:  |
| Contact:                               | RFQ / PO No.:   |
| Quantity:                              | Delivery:   |
|  |   |
| Package Type:                          |   |
| Nominal Frequency:                     |   |
| Crystal Cut:                           | □ AT (Std.) □ BT □ Other  |
| Mode of Operation:                     | <ul><li>☐ Fundamental</li><li>☐ 5th Overtone</li><li>☐ 3rd Overtone</li><li>☐ Standard for type</li></ul> |
| Load Capacitance (C <sub>L</sub> ):    | □ Parallel pF □ Series resonance  |
| Frequency Tolerance:                   | ±ppm @°C ±°C (25°C ±3°C Std   |
| Temperature Stability:                 | ±ppm from°C to°C  |
| Storage Temperature:                   | from°C to°C   |
| Aging Tolerance @ 25°C:                | ± ppm/year years maximum  |
| Equiv. Series Resistance (ESR):        | Ohms  |
| Shunt Capacitance (C <sub>0)</sub> :   | pF  |
| Motional Capacitance (C <sub>1):</sub> | from fF to fF   |
| Drive Level:                           | typical mW maximum mW   |
| Pullability:                           |   |
| Other Requirements:                    |   |

## CUSTOM CLOCK OSCILLATORS QUOTE / ORDER FORM

#### To order custom oscillators built to your specifications:

Please photocopy this page and fill out the information requested below. It is important to fill this out completely so that **FREQUENCY MANAGEMENT INTERNATIONAL** can promptly respond to your request. Not all combinations of parameters are feasible. Our technical staff will review each custom request and assist with any modifications necessary to meet your requirement.

**FAX** the information to: (714) 373-8700 Date: Company: Address: Telephone: Contact: RFQ / PO No.: Quantity: Delivery: ☐ HCMOS/TTL Compatible ☐ True TTL Logic Type: ☐ Other, \_\_\_\_\_ ☐ Thru-Hole □ SMD Package Type: ☐ Either **Nominal Frequency:** □ MHz □ kHz □ ±100 ppm max. (Std.) **Overall Frequency Tolerance:** ☐ ±25 ppm max. (Inclusive of Operating Temperature, □ ±50 ppm max. ☐ Other ppm max. Supply Voltage and Load Stability) □ 0°C to +70°C (Std.) □ -40°C to +85°C (Extended) □ Other, from \_\_\_\_ °C to \_\_\_\_ °C **Operating Temperature Range: Storage Temperature:** ☐ Standard for type ☐ Other, from \_\_\_\_\_ °C to \_ °C □ Other, \_\_\_\_\_ Vdc ±\_\_\_\_ Vdc Supply Voltage (V<sub>dd</sub>): ☐ Standard for type ☐ Other, \_\_\_\_\_ mA max. Supply Current (Icc): ☐ Standard for type ☐ Other, \_\_\_\_\_ % Symmetry (Duty Cycle): □ 40/60% (Std.) **□** 45/55% ☐ Other, \_\_\_\_\_ Vdc max. Output "0" Level (Vol): ☐ Standard for type Output "1" Level (Voh): □ Other, \_\_\_\_\_ Vdc min. ☐ Standard for type ☐ Other, \_\_\_\_\_ nSec. Rise/Fall Time: ☐ Standard for type Start Time: ☐ Standard for type ☐ Other, \_\_\_\_ mSec. □ CMOS \_\_\_\_ pF □ TTL \_\_\_ gates **Output Load:** ☐ Standard for type **Tri-State Function** □ None (No connect) ☐ Tri-State (Enabled/Disable) Other Requirements:

# CUSTOM VCXO's QUOTE / ORDER FORM

#### To order custom voltage controlled crystal oscillators built to your specifications:

Please photocopy this page and fill out the information requested below. It is important to fill this out completely so that **FREQUENCY MANAGEMENT INTERNATIONAL** can promptly respond to your request. Not all combinations of parameters are feasible. Our technical staff will review each custom request and assist with any modifications necessary to meet your requirement.

| FAX the I  | <u> </u>                                      | 3700                           |
|--|---|--------------------------------|
| Company:   |   |                                |
|  |   |                                |
| Contact  |   |                                |
| Contact:   |   |                                |
| Quantity:  | Delivery:                                     |                                |
|  |   |                                |
| Logic Type:  | ☐ HCMOS/TTL Compatible ☐ 0                    | Other,                         |
| Package Type:  |   |                                |
| Nominal Frequency:   |   | MHz □ kHz                      |
| Overall Frequency Tolerance:<br>(Inclusive of Operating Temperature,<br>Supply Voltage and Load Stability) |   | ±25 ppm max.<br>Other ppm max. |
| Operating Temperature Range:   | □ 0°C to +70°C (Std.) □ - □ Other, from °C to | 40°C to +85°C (Extended)       |
| Storage Temperature:   | ☐ Standard for type<br>☐ Other, from °C to    | _ °C                           |
| Supply Voltage (Vdd):  | ☐ Standard for type ☐ Other,                  | Vdc ± Vdc                      |
| Supply Current (Icc):  | ☐ Standard for type ☐ Other,                  | mA max.                        |
| Symmetry (Duty Cycle):   | □ 40/60% (Std.) □ 45/55%                      | o □ Other, %                   |
| Output "0" Level (VoL):  | ☐ Standard for type ☐ Other,                  | Vdc max.                       |
| Output "1" Level (Voн):  | ☐ Standard for type ☐ Other,                  | Vdc min.                       |
| Rise/Fall Time:  | ☐ Standard for type ☐ Other,                  | nSec.                          |
| Start Time:  | ☐ Standard for type ☐ Other,                  | mSec.                          |
| Output Load:   | ☐ Standard for type ☐ CMOS                    | pF □ TTL gates                 |
| Control Voltage (Vc):  | Vdc ± Vdc                                     |                                |
| Pullability:   | Minimum deviation: ±<br>Maximum deviation: ±  | ppm<br>ppm                     |
| Other Requirements:  |   |                                |

## CUSTOM TCXO/VCTCXO's QUOTE / ORDER FORM

#### To order custom TCXO or VCTCXO type oscillators built to your specifications:

Please photocopy this page and fill out the information requested below. It is important to fill this out completely so that **FREQUENCY MANAGEMENT INTERNATIONAL** can promptly respond to your request. Not all combinations of parameters are feasible. Our technical staff will review each custom request and assist with any modifications necessary to meet your requirement.

**FAX** the information to: (714) 373-8700 Date: Company: Address: \_\_\_\_\_ Telephone: Contact: RFQ / PO No.: Quantity: Delivery: □ VCTCXO **Product Type:** □ TCXO ☐ HCMOS/TTL Compatible ☐ Sinewave Logic Type: Package Type: **Nominal Frequency:** □ MHz □ kHz □ Mechanical (TCXO) ± \_\_\_\_\_ ppm minimum □ Electrical (VCTCXO) ± \_\_\_\_\_ ppm/Vdc Frequency Adjustment: \_ ppm maximum Frequency Stability: ☐ Other, ±\_\_\_\_ ppm max. Temperature Stability: ☐ Standard for type ☐ Other, ± ppm max.
☐ Other, ± ppm max.
☐ Other, ± ppm max./year ☐ Standard for type Supply Voltage: Load Stability: ☐ Standard for type Aging Stability (@ 25°C) ☐ Standard for type □ Other, from \_\_\_\_\_ °C to \_\_\_\_ °C **Operating Temperature:** □ 0°C to +50°C (Std.) ☐ Other, from \_\_\_\_\_ °C to \_\_\_\_ **Storage Temperature:** ☐ Standard for type □ Other, \_\_\_\_\_ Vdc ±\_\_\_\_ Vdc Supply Voltage (V<sub>dd</sub>): ☐ Standard for type Supply Current (Icc): ☐ Other, \_\_\_\_\_ mA max. ☐ Standard for type ☐ Other, % **□** 45/55% Symmetry (Duty Cycle): □ 40/60% (Std.) Output "0" Level (VoL): ☐ Other, Vdc max. ☐ Standard for type ☐ Other, \_\_\_\_\_ Vdc min. Output "1" Level (Voh): ☐ Standard for type Rise/Fall Time: ☐ Standard for type ☐ Other, \_\_\_\_\_ nSec. ☐ Standard for type ☐ Other, \_\_\_\_ mSec. Start Time: □ CMOS \_\_\_\_ pF (TTL \_\_\_ gates **Output Load:** ☐ Standard for type **Phase Noise:** ☐ Standard for type □ Other, Other Requirements: