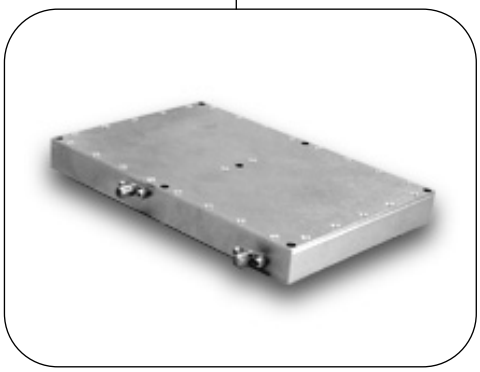
Synthesized Clock Frequency Translator Series

Features

- **Input / Output frequency up to 155.52 / 662.08 / 2488.32 MHz**
- **Ultra Low Jitter Generation (< 0.25 ps RMS)**
- **Flat Jitter Transition (< 0.05 dB)**
- **LOS Indicator**
- **Master and Slave Modes**
- **Smooth Transition from Master to Slave**
- **Phase Stable Output Signal Relative to Input**
- **PECL Input and Output**
- **High Reliability**

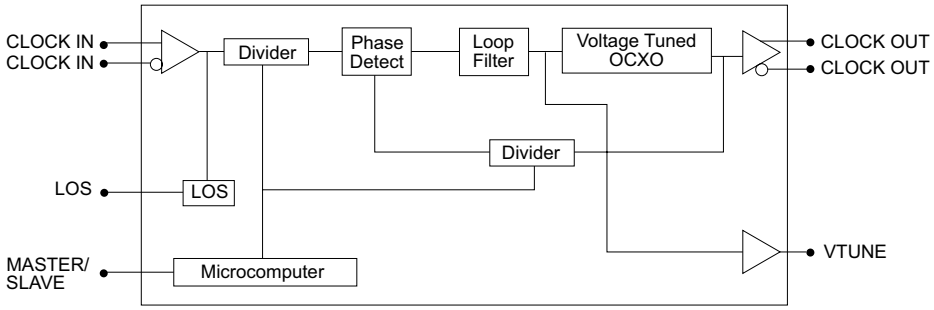


Size: 6.0” x 4.0” x 0.62”

Applications

- **FEC Clock Encoder / Decoders for 10 Gbit/s and up**
- **Sonet / SDH / DSL-PON Timing**

Block Diagram SCFT Series



Description

Elcom Technologies' Clock Frequency Translators employ proprietary technology to ensure a phase stable output clock and a smooth transition between Master and Slave operation. In the Slave mode the output frequency phase locks to the input clock, while in the Master mode the output signal is derived from an internally stable OCXO. The unit is designed for low power dissipation thus decreasing semiconductors junction temperatures and improving system reliability.

Specifications

Parameter	Typical	Maximum	Optional
Input Clock Signal	PECL		
Output Clock Signal	PECL		
Output Symmetry	50%	45% to 55%	
Jitter, RMS (20KHz to 20 MHz)	0.25 ps	0.5 ps	
Input Frequency Variation	± 20 ppm	± 30 ppm	± 40 ppm
Jitter Transfer	< .05 dB		
Input Frequency	8.192 to 2488 MHz		See Table A
Output Frequency	8.192 to 2488 MHz		See Table A
Temperature Range	- 10° to 70° C		- 40° to + 85° C
Power Supply +5V	600 mA		300 mA
+8V	50 mA		50 mA

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Ordering Information

SCFT - _____ - ___ ___ ___. ___ - ___ ___ ___ ___ . ___ - ___ - ___

Input Freq. | Output Freq. | Temp Range | Input/Output Type

Example: *SCFT - 77.6 - 2488.32 - A - P*

Standatd Frequencies - Table A (MHz)

1.024	13.00	27.0	77.76	155.52
1.544	16.384	38.88	82.944	166.6286
2.048	19.44	44.736	95.907	622.08
4.096	20.48	51.84	112	666.5143
8.192	26.00	61.44	139.264	2488.32

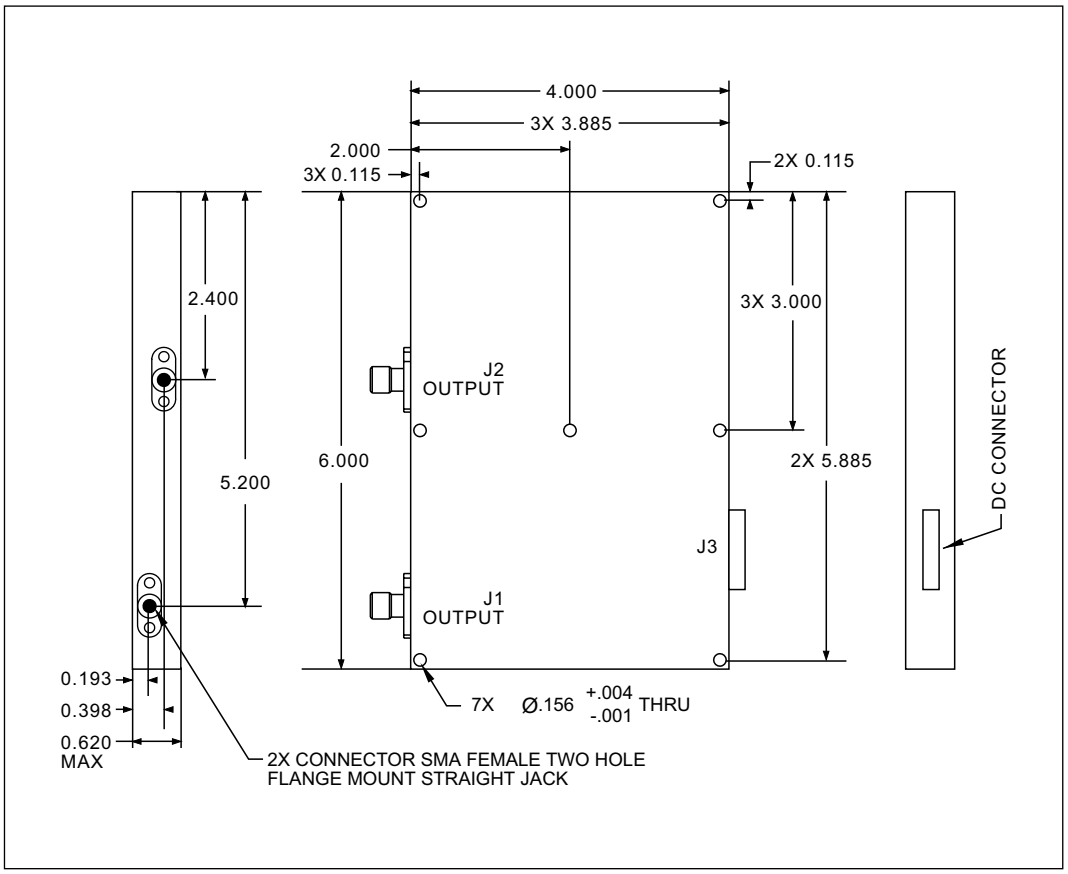
Temperature Range

A	-10° to +70° C
B	-40° to +85° C

Input / Output

P-	PECL
S-	Sine Wave

Outline drawing



Additional Products

- **Sonet / SDH Clock Oscillator**
- **Clock Recovery**
- **Phase Locked Clock Generator**
- **Synthesized Clock Frequency Translator**

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