

Helping Customers Innovate, Improve & Grow



Description

The TX-080 series offers performance for short-term stability, phase noise, aging and temperature stability normally only associated with Oven Controlled Crystal Oscillators, while consuming typically <20 mA.

Features

- Stratum 3 option
- "1 ppm Forever" option (0° to 50°C and 0° to 70°C)
- Frequency Range: 0.5 MHz to 160 MHz
- Previous Model: TC-140

Applications

- Severe Environmental Conditions

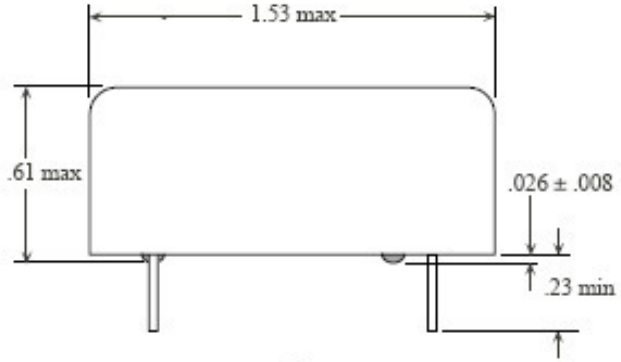
Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
Frequency Stabilities¹					
vs. operating temperature range (referenced to +25°C)	-4.6		+4.6	ppm	-40... +85°C
	-1.0		+1.0	ppm	-40... +85°C
	-4.6		+4.6	ppm	0... +70°C
	-1.0		+1.0	ppm	0... +70°C
	-0.5		+0.5	ppm	0... +70°C
	STS3		STS3	ppm	0... +70°C
	-4.6		+4.6	ppm	0... +50°C
	-1.0		+1.0	ppm	0... +50°C
	-0.2		+0.2	ppm	0... +50°C
	STS3		STS3	ppm	0... +50°C
vs. supply voltage change	-0.05		+0.05	ppm	Vs ± 5%
Supply Voltage (Vs)					
Supply voltage (Standard)	11.25	12.0	12.75	VDC	
Supply voltage (Option)	4.75	5.0	5.25	VDC	

Performance Specifications

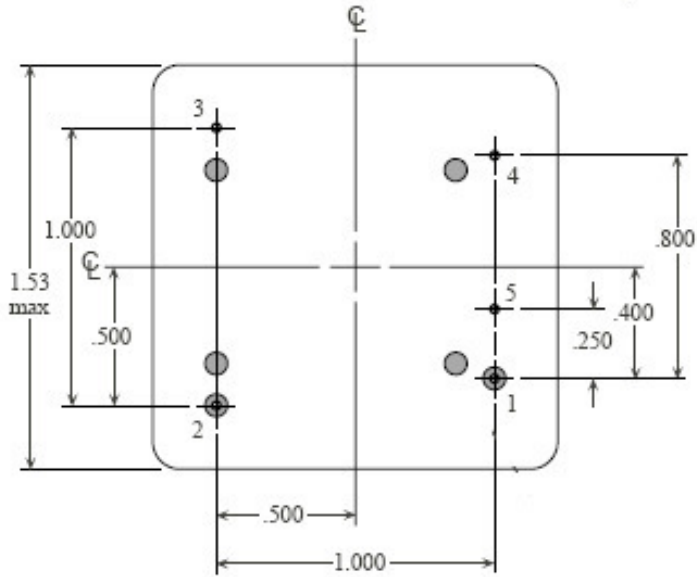
Parameter	Min	Typ	Max	Units	Condition
RF Output					
Signal	HCMOS				0.5 to 160 MHz
Load		10 TTL			100 k ohm // 10 pF
Signal Level (Vol)			+0.5 Vdc	V	
Signal Level (Voh)	0.8 (Vdd)			V	
Rise/Fall Time			5	ns	
Duty cycle	40		60	%	
Signal	10 TTL				0.5 to 160 MHz
Load					10 TTL
Signal Level (Vol)			+0.5 Vdc	VDC	
Signal Level (Voh)	+2.4 Vdc			VDC	
Rise/Fall Time			10	ns	
Duty cycle	40		60	%	
Signal	Sinewave				3.0 to 100 MHz
Load		50		ohm	
Output Power (Standard)	0.0	+3.0	+6.0	dBm	50 ohm load
Harmonics			-20	dBc	
Spurious			-60	dBc	
Signal (custom number required)	Sinewave				3.0 to 100 MHz (+12 Vdc only)
Load		50		ohm	
Output Power (Option)	+7		+13.0	dBm	50 ohm load
Harmonics			-20	dBc	
Spurious			-80	dBc	
Frequency Tuning (EFC)					
Tuning Range	Fixed; No adjust				
Tuning Range	±3.0			ppm	via internal mechanical adjust positive slope
Tuning Range	±3.0			ppm	via external voltage, 0 to +5 Vdc
Additional Parameters¹					
Phase Noise ³ (10 MHz, +12 Vdc, J - Output)			-110	dBc/Hz	10 Hz
			-135	dBc/Hz	100 Hz
			-150	dBc/Hz	1 kHz
			-155	dBc/Hz	10 kHz

Outline Drawing / Enclosure



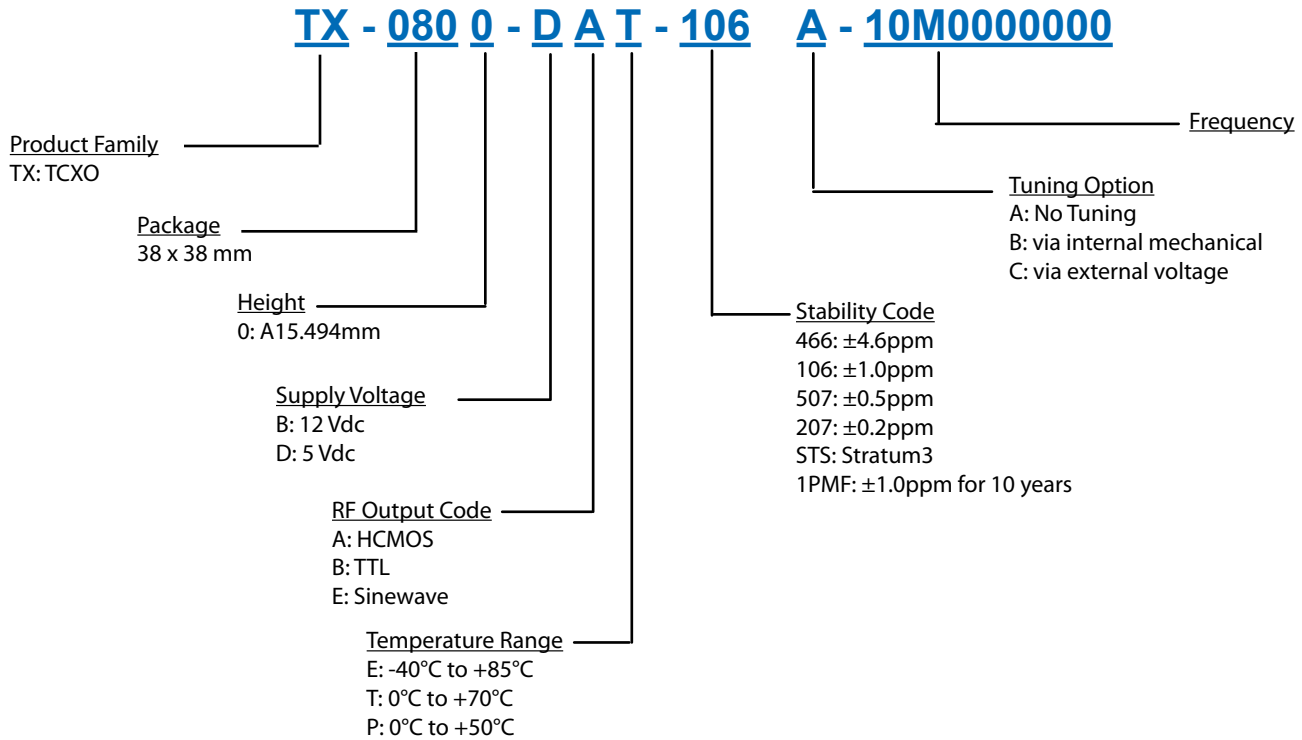
Dimensions in inches

Type A		
Code	Height "H"	Pin Length "L"
0	15.494	5.842



Pin Connections	
1	Output
2	Supply
3	Ground (Case)
4	Freq. Adjust
5	Ground

Ordering Information



Notes:

1. Contact factory for improved stabilities or additional product options. Not all options and codes are available at all frequencies.
2. Unless other stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C).
3. Phase noise degrades with increasing output frequency.
4. Subject to technical modification.
5. Contact factory for availability.

For Additional Information, Please Contact

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