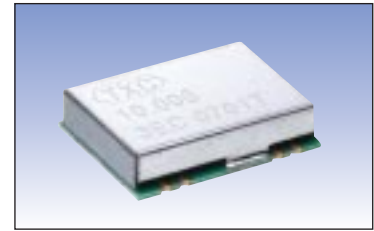


**25.4 x 20.3 mm SMD FREQUENCY TRANSLATOR / FX**

■ **Features**

- Input: 8 KHz ~ 100 MHz CMOS
- Output: 10 MHz ~ 800 MHz LVPECL

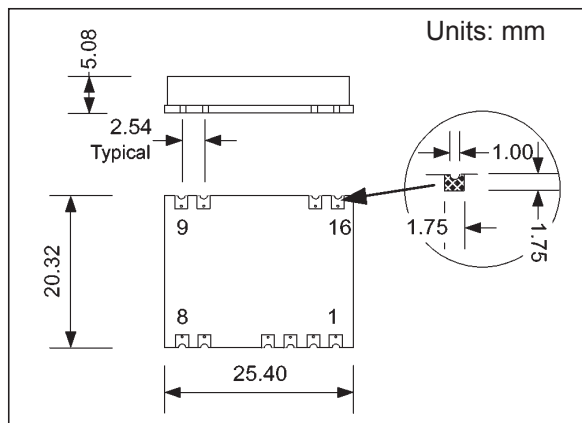


■ **Electrical Specifications** (Example- 8 KHz Input and 77.76 MHz Output)

Item	Type	FX
Output Waveform		LVPECL compatible
Output Load		50 Ω to 1.33 V
Supply Voltage		3.3 V
Output Frequency		77.76 MHz
Reference Frequency		8 KHz ± 2 ppm CMOS
VCXO Control Voltage Output		1.4 < U <sub>c</sub> < 2 V Decoupling with 470 KΩ serial resistor and 100 nF cap to GND.
Frequency Stability: (VCXO part)		± 25 ppm
Operating Temperature Range*		0 ~ +85 °C
Storage Temperature Range		-40 ~ +85 °C
Lock Detector Output		CMOS compatible
Synthesizer in lock		U <sub>lock</sub> = H (0.9 V <sub>cc</sub> Min.)
Synthesizer out of lock		U <sub>lock</sub> = L (0.1 V <sub>cc</sub> Max.)
Rise (Tr Max.) / Fall (Tf Max.) Time		0.6 ns Max. (20 ~ 80 %)
Supply Current		70 mA Max.
Symmetry		45 ~ 55 %
Start-up Time (VCXO)		10 ms Max. at 3.3V supply
Non-Harmonics Spurious		-140 dBc Max.
Phase Jitter Phase (12 KHz ~ 20 MHz)		1 ps Max.
Phase Noise		-90 dBc / Hz at 100 Hz
		-100 dBc / Hz at 1 KHz
		-110 dBc / Hz at 10 KHz
		-140 dBc / Hz > 50KHz
Input Breakdown Voltage		-0.5 ~ 5 V

\* Max. operating temperature range -20 ~ +85 °C

■ **Dimensions**



■ **Pins Connection**

Pin	Function
1	IN
2	GND
3	LD
4	U <sub>c</sub>
7	GND
8	ENABLE CONTROL
9	~ OUT
10	OUT
15	GND
16	VDD