



HCMOS/TTL TCXO / VC-TCXO IN SMD PACKAGE - TCSC Series

FEATURES

- RoHS Compliant (Pb-Free), Tight Stability over Wide Temperature Range
- Available with both Voltage Control for Electric Frequency Adjustments and Internal Trimmer
- HCMOS/TTL Compatible Output, Low Phase Noise
- Industry de factor Standard SMD Footprint

SPECIFICATIONS

Frequency Range	1.5 MHz to 40 MHz
Standard Frequency	10.012.8/13.0/14.4/15.36/16.8/19.44/20.0/24.576/26.0/40.0 MHz
Supply Voltage (Vcc)	A = 5.0 VDC \pm 5%; B = 3.3 VDC \pm 5%
Input Current	20 mA Maximum (1.5 MHz to 9.999 MHz); 30 mA Maximum (10 MHz to 35 MHz)
Storage Temperature	-40°C to 85°C
Controllable Frequency Option	VI = Voltage control: \pm 5 ppm Minimum + Internal trimmer: \pm 3 ppm Minimum I = Internal trimmer only (no voltage control input): \pm 3 ppm Minimum
Control Voltage (Vc)	2.5 \pm 2.0 VDC for Vcc = 5 VDC; 1.65 \pm 1.5 VDC for Vcc = 3.3 VDC
Setability of Vc at Fnom, 25°C	2.5 \pm 0.5 V DC for 5.0V part; 1.65 \pm 0.4 VDC for 3.3V part
Frequency Stability vs Temp. Temperature Range	005 = \pm 0.5 ppm; 010 = \pm 1 ppm; 015 = \pm 1.5 ppm; 020 = \pm 2 ppm; 025 = \pm 2.5 ppm A = 0°C to 70°C; B = -40°C to 85°C; F = 0°C to 50°C; H = -30°C to 75°C
Standard Stability	025H = \pm 2.5 ppm / -30°C to 75°C
Frequency Stability vs Vcc	\pm 0.3 ppm Maximum / Vcc \pm 5%
Frequency Stability vs Load	\pm 0.3 ppm Maximum / 10 kOhms// 10 pF \pm 10%
Aging	\pm 1 ppm Maximum per year @25°C
Phase Noise	-145 dBc/Hz at 1KHz
Output Load	10 TTL or 15 pF HCMOS Maximum
Logic "1" / Logic "0" Level	TTL: 2.4V Minimum / 0.4V Maximum; HCMOS: 0.9Vcc Minimum / 0.1Vcc Maximum
Rise/Fall Time (Tr/Tf)	10 ns Maximum
Duty Cycle	0 = No tristate 60/40%; 2 = No tristate 55/45%; 3 = Tristate 55/45%

Creating a Part Number

TCSC-25M000-A VI 025 H 0	
Product Series	Duty Cycle: see above
Frequency	Operating Temperature Range: A = 0 to 70°C
Supply Voltage: A = 5.0V	Frequency Stability: B = -40 to 85°C
B = 3.3V	Tuning: 010 = \pm 1.0 ppm H = -30 to 75°C
	VI 020 = \pm 2 ppm X = Customized Temp Range
	I 025 = \pm 2.5 ppm

OUTLINE DRAWING

