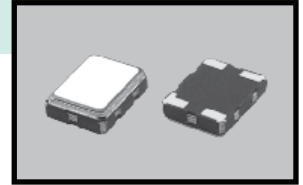


VC/TCXO (Clipped Sinus, CMOS)

TX3225



General Description

Compact size VC/TCXO for wireless and telecomm. applications

Features

Standard stability $\pm 2.5\text{ppm}$
Wide temp. range

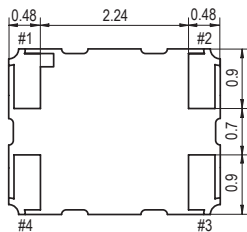
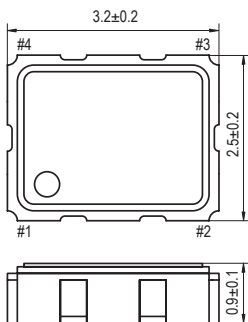
Main applications

Telecomm, Wireless,

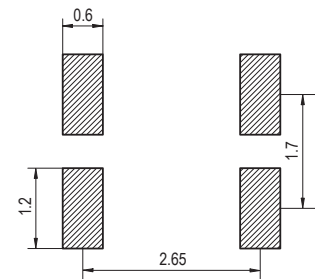
Electrical characteristics

Item	Values		
Part number	TX3225S	TX3225SV	TX3225C
Output Waveform	Clipped Sinus		CMOS
Frequency range	10 - 40 MHz		4 - 54 MHz
Supply voltage	+1.8V, +2.5V, +2.8V, +3.0V, +3.3V		
Control Voltage	-	+1.5V $\pm 1.0V$	-
Initial frequency tolerance @ +25°C	$< \pm 1.5\text{ppm}$ (Vcontrol = +1.5V)		$< \pm 1.0\text{ppm}$
Frequency stability vs temp. vs Vdd vs Load	$< \pm 2.5\text{ppm}$ max over -30/+75°C $< \pm 0.2\text{ppm}$ @ Vdd $\pm 5\%$ $< \pm 0.2\text{ppm}$ @ 10k Ω // 10pF $\pm 10\%$		$< \pm 2.5\text{ppm}$ max over -30/+75°C $< \pm 0.2\text{ppm}$ @ Vdd $\pm 5\%$ $< \pm 0.2\text{ppm}$ @ 15pF $\pm 10\%$
Aging	$< \pm 1.0\text{ppm}$ / year @ +25°C		
Operating temp. range	-30°C / +75°C, option -40°C / +85°C		
Storage temp. range	-40°C / +85°C		
Current consumption	1.7mA max		7mA max
Output	0.8Vp-p min.		10% Vdd - 90% Vdd
Output load	10k Ω // 10pF		15pF max
Frequency adjustment	-	± 8 to $\pm 13\text{ppm}$ (1.8V) ± 9 to $\pm 15\text{ppm}$ ($> 1.8V$)	-
Slope	-	positive	-
Start up time	10ms max		
SSB Phase noise	-135dBc/Hz typ. @ 1KHz offset		-145dBc/Hz typ. @ 1KHz offset
Short term stability	$\pm 1\text{ppb}$ max (allan variance tau=1s)		

Dimensions



PIN	CONNECTION	
	TCXO	VC-TCXO
1	GND (recommended) or Vcc	Vcontrol
2	GND	
3	OUTPUT	
4	VDD	



TX3225

Part Number Generator

TX3225S A 15 A S T - 010.000000 xxx
 0 1 2 3 4 5 6 7

0 : Type
 TX3225S
 TX3225SV
 TX3225C

5 : Pulling range
 T = TCXO
 8 > ±8.0ppm
 10 > ±10ppm

1 : Vcc
 F = +1.8V
 E = +2.5V
 A = +2.8V
 B = +3.0V
 C = +3.3V
 D = +5.0V

6 : Frequency (MHz)
 □□□.□□□□□□
 max 10 digits including comma

7 : Customized code
 Note : factory use

2 : Stability in temperature
 25 < 2.5ppm

3 Op. temp. range
 B = -30/+75
 A = -40/+85

4 : Output
 S = Clipped sinus
 C = CMOS