

Typical Applications

SDH/SONET
ATM
WLL
Measurement Equipment

Features

Meets **Stratum III** Overall Stability
Mechanical Control (internal Trimmer)
EFC Optional
Very Low Aging
Standard 4-Pin DIP Package



Frequency Range

10MHz – 26MHz

Standard Frequencies

19.44MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp range
vs. Operating temperature range	< ± 0.8 ppm	-20 ... +70°C
Parameter	Value	Condition
Initial tolerance	< ± 1.0 ppm	@ 25 °C
vs. Supply voltage change	< ± 0.1 ppm	V _s ± 5%
vs. Load change	< ± 0.1 ppm	Load ± 10%
vs. Aging / 15 years	< ± 2.5 ppm	
Overall tolerance 15 years	< ± 4.6 ppm	

Frequency tuning

Parameter	Option I	Value	Condition
Mechanical (No EFC)	Blank	> ± 5.0 ppm	(internal trimmer)
Electrical freq. control (EFC)	U	> ± 5.0 ppm	Note 1
Voltage range (V _c)		0.5 to 4.5 V	@ V _s =5.0 V
		0.3 to 3.0V	@ V _s =3.3 V
Pulling slope		positive	
Freq. control input impedance		>10 k Ω	

RF output

Parameter	Value	Condition
Signal	HCMOS	
Load	15pF ± 10%	
Duty cycle	40/60%	@ V _s /2

Supply voltage

Parameter	Code I	Value	Condition
Supply voltage (V _s)	05	5 V ± 5%	
Current consumption		< 18 mA	
Supply voltage (V _s)	33	3.3 V ± 5%	
Current consumption		< 18 mA	

Additional parameters

Parameter	Value	Condition
Phase Noise	<- 90 dBc/Hz	10 Hz
	<-120 dBc/Hz	100 Hz
	<-140 dBc/Hz	1 kHz
	<-145 dBc/Hz	10 kHz
	<-150 dBc/Hz	100 kHz

Note 2

Additional parameters

Parameter	Value	Condition
Weight	< 10 g	
Operable temperature range	-30 ... +80°C	
Storage temperature range	-55 ... +105°C	
Processing & Packing	handling&processing note	

Enclosure

Type	G125C												
Drawing													
Pin Connections	<table border="0"> <tr><td>Pin 1</td><td>N/C</td></tr> <tr><td>Pin 1</td><td>Voltage Control (Vc)</td></tr> <tr><td>Pin 2</td><td>GND, case</td></tr> <tr><td>Pin 3</td><td>RF output</td></tr> <tr><td>Pin 4</td><td>Supply Voltage (Vs)</td></tr> </table>	Pin 1	N/C	Pin 1	Voltage Control (Vc)	Pin 2	GND, case	Pin 3	RF output	Pin 4	Supply Voltage (Vs)	Option U	Mechanical freq. Control Electrical and mech. freq. Control
Pin 1	N/C												
Pin 1	Voltage Control (Vc)												
Pin 2	GND, case												
Pin 3	RF output												
Pin 4	Supply Voltage (Vs)												

all units in mm

Ordering Code	Option I	Code I	
Model	Frequency tuning	Supply voltage	Frequency
Example: CCO50	U	05	19M440
Order: CCO50			

Notes

- 1 Others available
 - 2 Typical values @ 19.44 MHz
- Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)
 Subject to technical modification; Not all options are available at all Frequencies