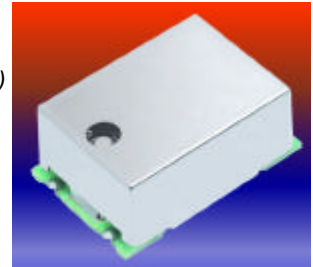


**Typical Applications**

SDH/SONET  
ATM  
WLL  
Measurement Equipment

**Features**

Meets **Stratum III** Overall Stability  
Mechanical Control (internal Trimmer)  
EFC Optional  
Very Low Aging  
Standard Surface Mount Package



**Frequency Range**

**10MHz – 80MHz**

**Standard Frequencies**

10; 19.44; 38.88MHz

**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 <sub>s</sub> ± 5%
vs. Load change	< ± 0.1 ppm	Load ± 10%
vs. Aging / 15 years	< ± 2.5 ppm	
<b>Overall tolerance 15 years</b>	<b>&lt; ± 4.6 ppm</b>	

**Frequency tuning**

Parameter	Option I	Value	Condition
Mechanical (No EFC)	<b>Blank</b>	> ± 5.0 ppm	(internal trimmer)
Electrical freq. control (EFC)	<b>U</b>	> ± 5.0 ppm	Note 1
Voltage range (V <sub>c</sub> )		0.5 to 4.5 V	@ V <sub>s</sub> =5.0 V
		0.3 to 3.0 V	@ V <sub>s</sub> =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 <sub>s</sub> /2

**Supply voltage**

Parameter	Code I	Value	Condition
Supply voltage (V <sub>s</sub> )	<b>05</b>	5.0 V ± 5%	
Current consumption		< 50 mA	
Supply voltage (V <sub>s</sub> )	<b>33</b>	3.3 V ± 5%	
Current consumption		< 50 mA	

**Additional parameters**

Parameter	Value	Condition	
Phase Noise	<- 95 dBc/Hz	10 Hz	Note 2
	<-130 dBc/Hz	100 Hz	
	<-140 dBc/Hz	1 kHz	
	<-150 dBc/Hz	10 kHz	
	<-150 dBc/Hz	100 kHz	

**Additional parameters**

Parameter	Value	Condition
Weight	< 5 g	
Operable temperature range	-30 ... +80°C	
Storage temperature range	-55 ... +105°C	
Processing & Packing	handling&processing note	

**Enclosure**

Type	G182A
<b>Drawing</b>	
<p><b>G182</b> H = 8,3 ; G182 A</p>	
all units in mm	
<b>Pin Connections</b>	
Pin 1	N.C.
Pin 1	Control Voltage (Vc)
Pin 2	GND, case
Pin 3	RF output
Pin 4	Supply Voltage (Vs)
<b>Option U</b>	Mechanical freq. Control Electrical and mech. freq. Control

	Ordering Code	Option I	Code I
	Model	Frequency tuning	Supply voltage
Example:	STO150S3	U	05
Order:	STO150S3		

**Notes**

- 1 Others available
  - 2 Typical values @ 10.00 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