STO50

TCXO

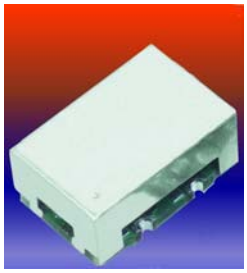
Preliminary

Typical Applications

PCS Base Stations
Land Mobile Radio
Cellular Telephony
Radio in the Local Loop
Digital Switching

Features

EFC Standard
Standard Surface Mount Package
Small Size
Low Profile
High Stability



Frequency Range **10 MHz – 33 MHz**

Standard Frequencies 19.44 MHz

Frequency stabilities

Parameter	Code I	Frequency stability	Operating temp range
vs. Operating temperature range	**09**	± 2.5 ppm	-20 ... +70°C
	04	± 1.0 ppm	
	05	± 1.0 ppm	0 ... 50°C
	06	± 0.5 ppm	
vs. Supply voltage change vs. Load change vs. Aging / year		< ± 0.5 ppm < ± 0.2 ppm < ± 1.0 ppm	V_s ± 5% Load ± 10%

Frequency tuning

Parameter	Option I	Value	Condition
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 3.0 V	@ V_S= 3.3 V
Pulling slope		Positive	
Freq. control input impedance		>10 k Ω	

RF output

Parameter	Code III	Value	Condition
Signal	**06**	HCMOS	
Load		25pF ± 10%	< 20MHz
		15pF ± 10%	≥ 20MHz
Duty cycle		40/60%	@ V_S/2
Signal	**11**	Clipped sinewave	
Load		10kΩ±10%||10pF±10%	
Output power		> 0.7 V_{PP}	@ 10kΩ ||10pF

Supply voltage

Parameter	Code II	Value	Condition
Supply voltage (V_S)	**05**	5V ± 5%	
Current consumption		< 18mA	
Supply voltage (V_S)	**33**	3.3 V ± 5%	
Current consumption		< 15mA	

Additional parameters

Parameter	Value	Condition	
Phase Noise	<- 90 dBc/Hz	10 Hz	Note 2
	<-120 dBc/Hz	100 Hz	
	<-135 dBc/Hz	1 kHz	
	<-140 dBc/Hz	10 kHz	
	<-145 dBc/Hz	100 kHz	

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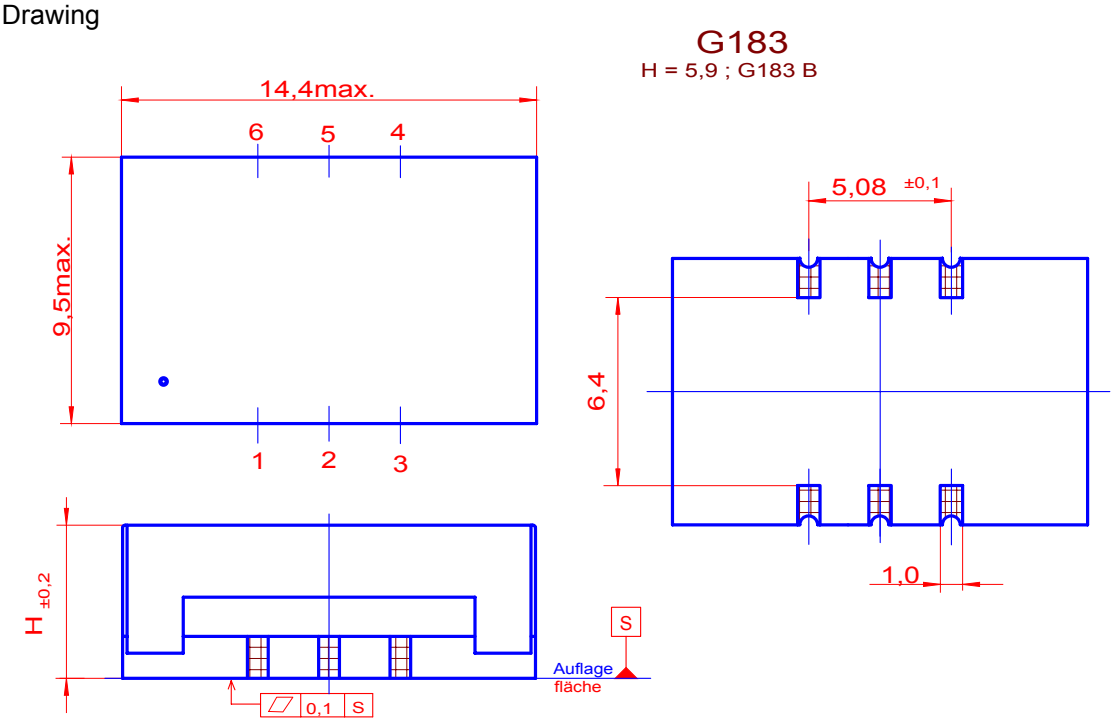
Additional parameters

Parameter	Value	Condition
Weight	< 3 g	
Operable temperature range	-30 ... +80°C	
Storage temperature range	-55 ... +105°C	
Processing & Packing	handling&processing note	

Enclosure

Type	G183B

Drawing



all units in mm

Pin Connections

Pin 1	Voltage Control (Vc)
Pin 2	N.C.
Pin 3	GND, case
Pin 4	RF output
Pin 5	N.C.
Pin 6	Supply Voltage (V_s)

	Ordering Code	Option I	Code I	Code II	Code III	
	Model	**Frequency tuning**	**Frequency Stability**	**Supply Voltage**	**RF Output**	**Frequency**
Example:	STO50	U	09.	33.	06.	19M44000
Order:	STO50					

Notes

1 Others available

2 Typical values @ 19.44MHz

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

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