

# Wide Band VCO

# VO3252S/02

## Electrical specification

Parameter	Min.	Typ.	Max.	Unit
Frequency range*	3		5	GHz
Output power, over all*	21***		28	dBm
Power vs. frequency*		2	4	dB
Power vs. temperature*		1	2	dB
Temperature drift *		2.5	3	MHz/°C
2:nd harmonic		-30	- 25	dBc
Spurious			- 60	dBc
FM noise* (SSB) 100 kHz 1MHz		-95 -120	-90 -110	dBc/Hz dBc/Hz
Tuning voltage*	0		+20	V
Tuning sensitivity*	50		300	MHz/V
Non-linearity			±10	%
Pulling, VSWR 1.5:1****		±.1	±2	MHz
Pushing		0.2	1	MHz/V
Slew rate	20	40		GHz/µs
Modulation bandwidth	10	13		MHz
PTD**			±25	MHz

T<sub>a</sub> = 25°C, unless otherwise stated.

**Notes:**

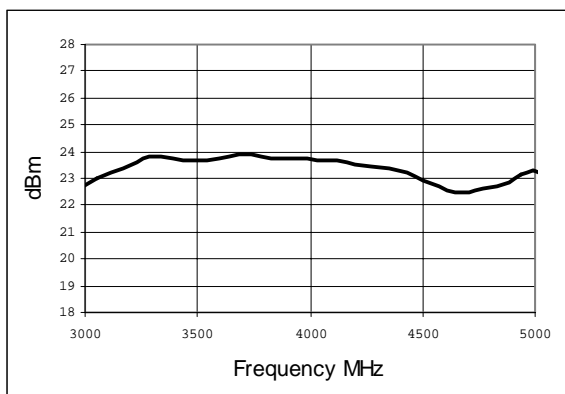
- \* 100% tested and guaranteed values. Other data are indicative.
- \*\* from 1µs to 1s after frequency jump
- \*\*\* 20dBm vid >65°C

\*\*\*\*No frequency jump for any mismatch  $|S_{11}| \leq 1$

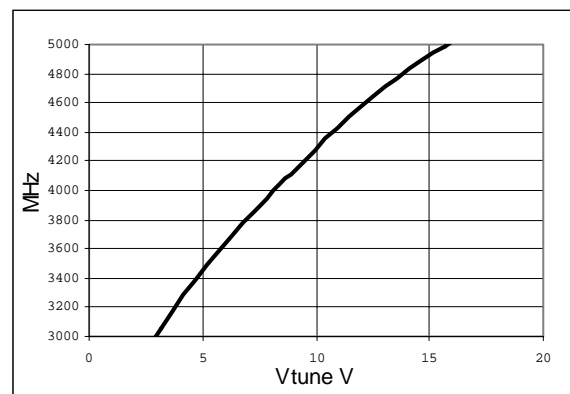
## Interface/environmental specification

Parameter	Min	Max	Unit
Bias voltage	14.6	16	V
Bias current*		300	mA
Tuning voltage (damage level)		23	V
Operating temperature	0	+70	°C
Storage temperature	-50	+100	°C
Weight		7	g

### Typical Pout vs. frequency



### Typical frequency vs. Vtune

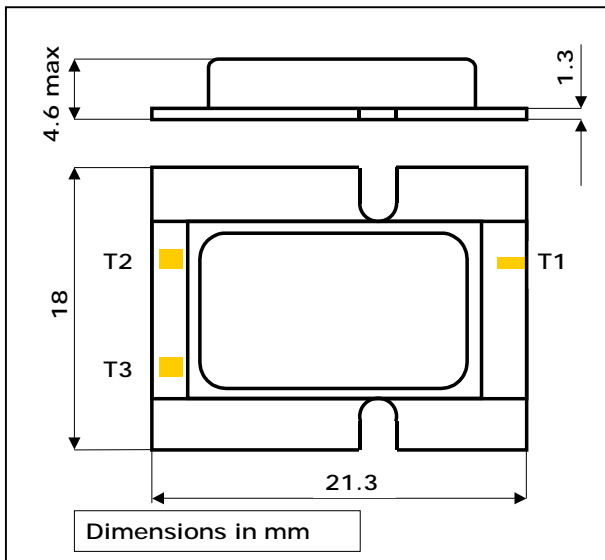


Note: Actual performance for each individual is stored in standard file format !

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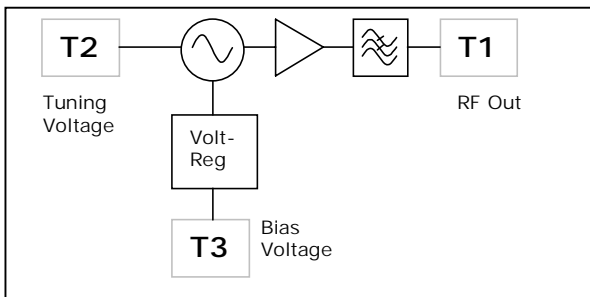
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## Outline drawing

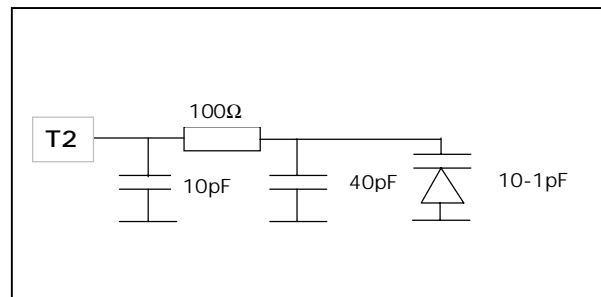


T1	RF Out (50 Ω)	Bond Pad	0.25 x 0.50 mm
T2	Tuning Voltage	Bond Pad	0.80 x 0.80 mm
T3	Bias Voltage	Bond Pad	0.80 x 0.80 mm

## Simplified block diagram



## Tuning input interface



Data subject to change without notice.  
SPLT6019\_C\_VO3252S02.doc