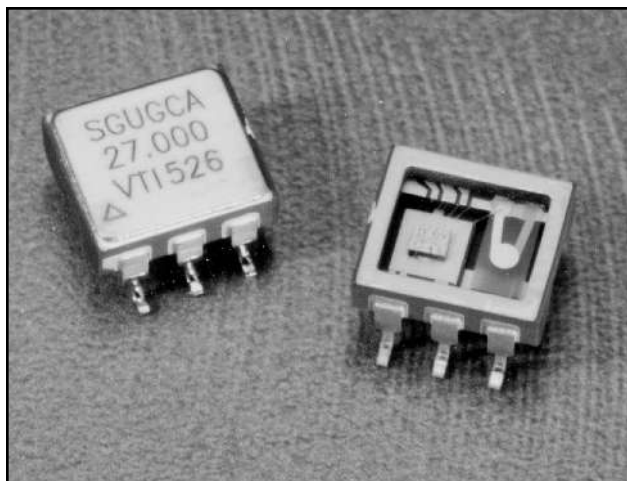


# Voltage Controlled Crystal Oscillators (VCXO's)

## S-Type



### Description:

The S-Type is a high volume, high reliability CMOS VCXO. It is ASIC based and available in a through-hole or SMD industry standard footprint ceramic package.

### Features:

- Frequencies to 65.536 MHz
- 5 or 3.3 volt operation
- <6 ps rms jitter (typical)
- Advanced custom ASIC technology
- Surface mountable
- Tri-state output
- 0/70°C or -40/85°C Operating Temp. Range
- Not for new designs

### Performance Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Units
Frequency:	$f_o$	1.024		65.536	MHz
Supply Voltage: (+3.3 V) (+5.0 V)	$V_{DD}$	2.97 4.5	3.3 5.0	3.63 5.5	V
Supply Current:	$I_{DD}$	50Hz			mA
Output Logic Levels ( $V_{DD} = 4.5V$ ):					
Output Logic High:	$V_{OH}$	$0.9 \cdot V_{DD}$		--	V
Output Logic Low:	$V_{OL}$	--		$0.1 \cdot V_{DD}$	V
Transition Times:					
Rise Time	$t_R$			5	ns
Fall Time	$t_F$			5	ns
Symmetry or Duty Cycle:	SYM	45		55	%
Operating temperature ( <i>ordering option</i> ):		0/70 or -40/85			°C
Test Conditions for APR (+5V option):	$V_c$	0.5		4.5	V
Test Conditions for APR (+3.3V option):	$V_c$	0.3		3.0	V
Absolute Pull Range ( <i>ordering option</i> ):	APR	+/-50 +/- 80 +/-100			ppm
Gain Transfer:		Positive			ppm/V
Control Voltage Leakage Current:	$I_{vcxo}$			$\pm 1$	$\mu A$
Control Voltage Bandwidth (-3dB):	BW	10			kHz
Package Size:		7.8 x 8.5 x 3.3			mm