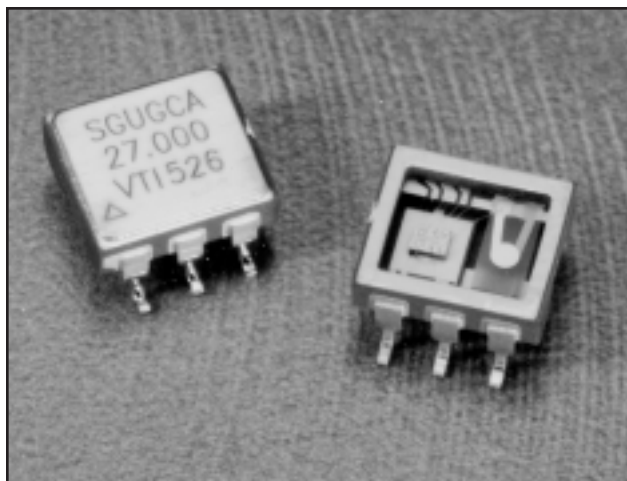


Voltage Controlled Crystal Oscillators (VCXO's)

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 (output frequencies >12 MHz)
- Advanced custom ASIC technology
- Surface mountable
- TTL or CMOS selectable
- Tri-state output
- 0/70°C or -40/85°C Operating Temp. Range

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}	10mA +0.25mA/MHz			mA
Output Logic Levels ($V_{DD}=4.5V$):					
Output Logic High:	V_{OH}	$0.8 \cdot V_{DD}$		--	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}			± 1	μA
Control Voltage Bandwidth (-3dB):	BW	10			kHz
Package Size:		7.8 x 8.5 x 3.3			mm

