



SVE

SMD TYPE

# VCXO

## SVD, SVE, SVF

- Voltage Controlled Crystal Oscillator
- HCMOS/TTL output
- 5.0V & 3.3V supply voltage
- Wide frequency and pull range
- Surface mount package
- Available on tape and reel

### ELECTRICAL SPECIFICATIONS

Frequency Range	1.000 to 60.000MHz		
Operating Temperature Range	0 to +70°C or -40 to +85°C		
Storage Temperature Range	-40 to +85°C		
Supply Voltage(V <sub>DD</sub> )	5.0V <sub>DC</sub> ± 5%		3.3V <sub>DC</sub> ± 5%
Aging (at 25°C)	± 3ppm/year max.		
Load Drive Capability	10 TTL Load or 15pF HCMOS Load		
Start-up Time	10ms max.		
Frequency Deviation / Pin 1 Control Voltage	2.5V <sub>DC</sub> ± 2.0V <sub>DC</sub>	± 10, ± 30, ± 50, ± 100ppm min.	
	2.5V <sub>DC</sub> ± 2.5V <sub>DC</sub>	± 10, ± 30, ± 50, ± 100, ± 150ppm min.	
	1.65V <sub>DC</sub> ± 1.65V <sub>DC</sub> (or ± 1.5V <sub>DC</sub> )	± 10, ± 30, ± 50, ± 100, ± 150ppm min.	
Linearity	± 20, ± 15, ± 10, ± 5%(Optional)		
Input Current	1.000 to 20.000MHz	20mA max.	15mA max.
	20.001 to 40.000MHz	30mA max.	25mA max.
	40.001 to 60.000MHz	40mA max.	35mA max.
Frequency Stability	± 50, ± 25, ± 20, ± 10ppm		
Output Voltage Logic High(V <sub>OH</sub> )	w/TTL Load	2.4V <sub>DC</sub> min.	
	w/HCMOS Load	90% of V <sub>DD</sub> min.	
Output Voltage Logic Low(V <sub>OL</sub> )	w/TTL Load	0.4V <sub>DC</sub> max.	
	w/HCMOS Load	10% of V <sub>DD</sub> max.	
Duty Cycle	at 50% of Waveform w/HCMOS Load or 1.4V <sub>DC</sub> w/TTL Load	50 ± 10% (STD)	
		50 ± 5% (Optional)	
Rise / Fall Time	5ns max.		
Period Jitter : pk-pk	100ps max.		
Period Jitter : One Sigma	25ps max.		

### MECHANICAL DIMENSIONS

