

STRATUM IV SMD PRECISION OSCILLATOR

DFN S1-K (5 V) & DFN S1-L (3.3 V)

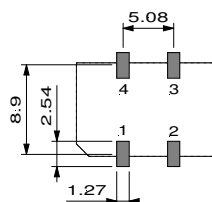
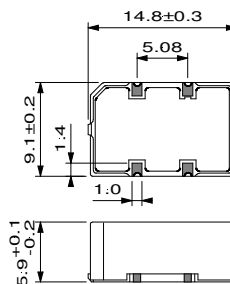
KEY FEATURES

2 to 80 MHz

Stratum IV compliant over -40 to 85°C

APPLICATIONS

Stratum IV and IVE



PC board footprint

Function	DFN S1
Enable/Disable	1
Gnd	2
Output	3
Vcc	4

TYPE	DFN S1-KHZ	DFN S1-LHZ
Frequency Range	2 to 80 MHz	2 to 80 MHz
Standard Frequencies	12.8; 16.384; 19.44; 20; 38.88; 34.368; 44.736; 51.84 & 77.76 MHz	

ELECTRICAL SPECIFICATIONS		DFN S1-KHZ	DFN S1-LHZ
supply voltage		5 V ± 5 %	3.3 V ± 5 %
supply current (no load)	≤ 25 MHz ≤ 70 MHz > 70 MHz	≤ 20 mA ≤ 40 mA ≤ 70 mA	≤ 10 mA ≤ 15 mA ≤ 35 mA
output load		HCMOS 50 pF or 10 TTL ≤ 25 MHz HCMOS 15 pF > 25 MHz	HCMOS 15 pF
duty cycle		40/60...60/40 % @ 50% level	40/60...60/40 % @ 50% level
rise/fall times (HCMOS @ 15 pF load)		10 to 90 % ≤ 7 ns up to 25 MHz ≤ 3 ns > 25 MHz	10 to 90 % ≤ 7 ns up to 25 MHz ≤ 3 ns > 25 MHz
high/low levels		≥ 4.5 V / ≤ 0.5 V	≥ 2.8 V / ≤ 0.3 V
Jitter RMS (1 kHz to 20 MHz)		≤ 1 ps RMS (f = 50 MHz)	≤ 1 ps RMS (f = 50 MHz)
tri-state output on pin 1		high or open = enable, low = high Z	high or open = enable, low = high Z
start up		≤ 10 ms @ 4.5 V	≤ 10 ms @ 3.15 V

FREQUENCY STABILITY			detailed tolerances [ppm]				
type	temperature range	model code	temperature	stability versus: Vcc ± 5 %	ageing	overall stability	calibration @ 25 °C
Telcordia GR-1244 CORE Stratum IV or IVE							
all types	0 to 70 °C	XB32D	± 15 typ.	± 1.5 typ.	± 10 typ. over 20 years	≤ ± 32 over 20 years	± 5 typ.
	-20 to 70 °C	XC32D					
	-40 to 85 °C	XE32D					

OPTIONS	CODE
tight symmetry (f ≤ 50 MHz)	R

ORDERING CODE	type + option code + frequency + temperature code
Example	DFN S1-LHZ 77.76 MHz XE32D