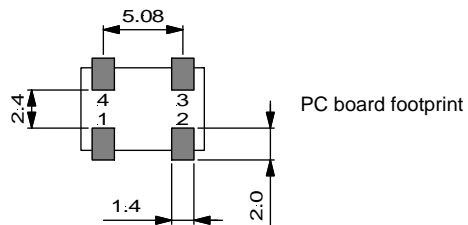
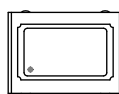
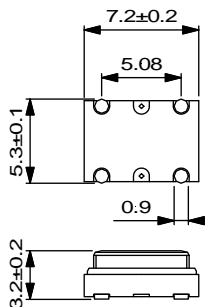


## STRATUM IV SMD MINIATURE PRECISION OSCILLATOR DFN S2-K (5 V) & DFN S2-L (3.3 V)

KEY FEATURES
2 to 80 MHz
Stratum IV compliant over -40 to 85°C
APPLICATIONS
Stratum IV and IVE

Function	DFN S2
Enable/Disable	1
Gnd	2
Output	3
Vcc	4



TYPE	DFN S2-KHZ	DFN S2-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 S2-KHZ	DFN S2-LHZ
supply voltage	5 V ± 5 %	3.3 V ± 5 %
supply current (no load)	≤ 25 MHz ≤ 40 mA ≤ 70 MHz ≤ 40 mA > 70 MHz ≤ 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
<b>Telcordia GR-1244 CORE Stratum IV or IVE</b>							
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 S2-LHZ 19.44 MHz XC32D