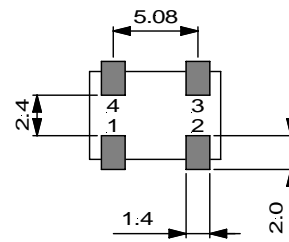
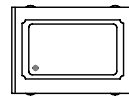
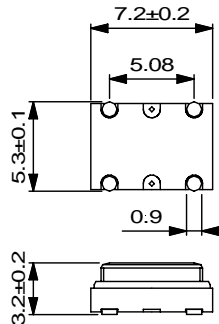


STRATUM III ULTRA MINIATURE SURFACE MOUNT TCXO DFA S2-KHZ (5 V) & LHZ (3.3 V)

FEATURES
10 to 52 MHz
Stratum III compliant over -40 to 85°C up to 38.88 MHz
Sonet Minimum Clock compliant over -40 to 85°C up to 52 MHz
APPLICATIONS
Stratum III and SMC



PC board footprint

Function	DFA S2
E / D	1
GND	2
Output	3
Vcc	4

TYPE	DFA S2-KHZ	DFA S2-LHZ
Frequency Range	10 to 20 MHz, soon to 38.88 MHz* (BSM & ESM up to 52 MHz)	
Standard Frequencies	12.8, 16.384, 19.44, 20, 34.368, 38.88 & 44.736 MHz	

ELECTRICAL SPECIFICATIONS	DFA S2-KHZ	DFA S2-LHZ
supply voltage	5 V ± 5 %	3.3 V ± 5 %
supply current (no load)	≤ 20 mA	≤ 10 mA
output load	HCMOS 15 pF or 2 TTL	HCMOS 15 pF or 2 TTL
duty cycle @ 50% level	45/55...55/45 %	45/55...55/45 %
rise/fall times (10 to 90 %)	≤ 5 ns	≤ 5 ns
high/low levels or output amplitude	≥ 4.5 V / ≤ 0.5 V	≥ 2.8 V / ≤ 0.3 V
start-up	≤ 10 ms @ 4.75 V	≤ 10 ms @ 3.15 V
tri-state control on pin 1	high or open = enable, low = high Z	high or open = enable, low = high Z

FREQUENCY STABILITY			detailed tolerances [ppm]						
type	temperature range	model code	stability versus:			overall stability	Holdover stability	24 hrs drift	calibration @ 25°C
			temperature	Vcc ± 5 %	ageing				
Telcordia GR-1244 CORE Stratum III or ITU-T G.813 option 1									
all types	0 to 50°C	AS3	≤ ± 0.28	≤ ± 0.1	≤ ± 3	≤ ± 4.6	≤ ± 0.37	≤ ± 0.04	≤ ± 0.8
	0 to 70°C	BS3			over	over			
	-20 to 70°C	CS3			15 years	15 years			
	-40 to 85°C	ES3							
Telcordia GR-253 CORE SMC or ITU-T G.813 option 2									
all types	0 to 70°C	BSM	≤ ± 3.5	≤ ± 0.3	≤ ± 10	≤ ± 20	≤ ± 4.6	≤ ± 0.5	≤ ± 1
	-40 to 85°C	ESM			over	over			
					20 years	20 years			

DEFINITIONS	
24 hours drift	GR-1244-CORE, GR-253-CORE or G.813
24 hours holdover mode	Over full temperature range and Vcc ± 0.5 %

ORDERING CODE	type + option code + frequency + model code
Example	DFA S2-LHZ 19.44 MHz BS3

*Please consult factory for availability