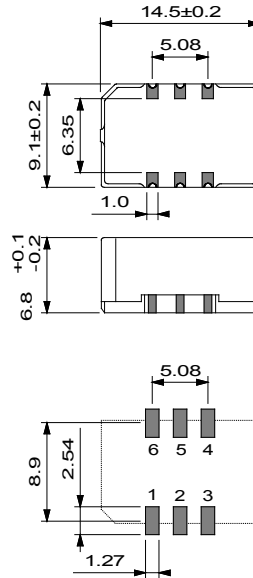


MINIATURE SURFACE MOUNT OCXO

DFO S1-LH or LHV or LHZ or LHZV (3.3 V)

FEATURES
10 to 50 MHz
HCMOS output, Tight stability
Stability ± 20 ppb
APPLICATIONS
Bases stations, IP timing, Femtocell, LTE, Network timing and Synchronisation



PRELIMINARY

Function	DFO S1
NC or V control	1
NC or E / D	2
GND	3
Output	4
NC	5
Vcc	6

PC board footprint

TYPE	DFO S1-LH
Frequency Range	10 to 50 MHz
Standard Frequencies	10, 12.8, 13, 19.2, 19.44, 20, 25, 26 & 38.88 MHz

ELECTRICAL SPECIFICATIONS	
supply voltage	3.3 V \pm 5 %
Power supply (warm-up)	≤ 1.6 W; 1.4 W typ.
Power (steady state, still air) @ -40 °C	0.6 W typ.
Power (steady state, still air) @ 25 °C	0.3 W typ.
output load	HCMOS 15 pF or 2 TTL
duty cycle @ 50% level	45/55...55/45 %
rise/fall times (10 to 90 %)	≤ 5 ns
high/low levels or output amplitude	≥ 2.8 V / ≤ 0.3 V
SSB phase noise (1 Hz B.W.) (Typical values at 19.2 MHz)	-85 dBc/Hz @ 10 Hz -115 dBc/Hz @ 100 Hz -140 dBc/Hz @ 1 kHz -150 dBc/Hz @ 10 kHz
warm-up time @ 25°C	≤ 3 min to reach ± 100 ppb

FREQUENCY STABILITY			detailed tolerances				
type	temperature range	model code	temperature	stability versus:		calibration @ 25°C	
				Vcc \pm 1 %	load \pm 10 %	ageing	
all types	-20 to 70°C	C58	$\leq \pm 50$ ppb	$\leq \pm 20$ ppb	$\leq \pm 10$ ppb	$\leq \pm 1$ ppm	$\leq \pm 1$ ppm
		C28	$\leq \pm 20$ ppb				
	-40 to 85°C	E17	$\leq \pm 100$ ppb				
		E58	$\leq \pm 50$ ppb				

OPTIONS	CODE	
Tri-state control on pin 2	Z	High or open = enable, Low = high Z
Voltage control on pin 1	V	$\geq \pm 5$ ppm, $\leq \pm 15$ ppm for 1.65 V \pm 1.35 V; positive slope
Input impedance		≥ 100 k Ω

ORDERING CODE	type + option code + frequency + model code
Example	DFO S1-LHZV 26 M E58