

HIGH FREQUENCY SURFACE MOUNT TCXO

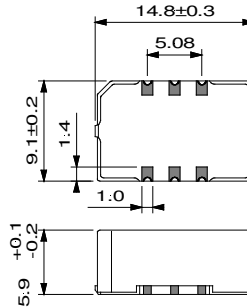
DFA S1-MLHZ or DFA S1-MLHZV (3.3 V)

FEATURES

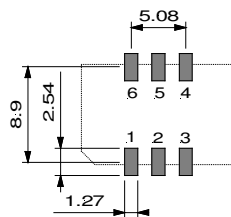
- 32 to 125 MHz HCMOS output**
- Low noise frequency multiplier**
- Analogue temperature compensation**

APPLICATIONS

SDH/Sonet, Microwave



Patent Pending



PC board footprint

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

TYPE	DFA S1-MLHZ
Frequency Range	32 to 125 MHz

ELECTRICAL SPECIFICATIONS	
supply voltage	3.3 V ± 5 %
supply current (no load)	≤ 50 MHz ≤ 20 mA > 50 MHz ≤ 25 mA
output load	HCMOS 15 pF or 1 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
subharmonics @ 100 MHz (multipl. by 4)	≤ -60 dBc @ 25 MHz ≤ -50 dBc @ 50 MHz ≤ -40 dBc @ 75 MHz
SSB phase noise @ 100 MHz (typ.)	-73 dBc/Hz @ 10 Hz -103 dBc/Hz @ 100 Hz -128 dBc/Hz @ 1 kHz -138 dBc/Hz @ 10 kHz -140 dBc/Hz @ 100 kHz
start-up	≤ 10 ms @ 3.15 V
tri-state control on pin 2	high or open = enable, low = high Z

FREQUENCY STABILITY			detailed tolerances [ppm]			
type	temperature range	model code	stability versus:			calibration @ 25°C
			temperature	Vcc ± 5 %	load ± 10 %	
all types	0 to 70 °C	B0.8*	≤ ± 0.8	≤ ± 0.2	≤ ± 0.1	≤ ± 1
	-20 to 70 °C	C0.8*	≤ ± 0.8			
	-40 to 85 °C	E1*	≤ ± 1.0			
	-40 to 85 °C	E2	≤ ± 2.0			
remarks			* Not available at all frequencies, please consult factory for more details ageing is 1 st year at 25°C			

OPTIONS	CODE	
voltage control (positive slope)	V	≥ ± 5 ppm, ≤ ± 15 ppm for 1.65 V ± 1.35 V
Input impedance		≥ 100 kΩ

ORDERING CODE	type + option code + frequency + model code
Example	DFA S1-MLHZ 100.000 MHz E1 or DFA S1-MLHZV 100.000 MHz E1