

## SURFACE MOUNT TCXO WITH INTERNAL TRIMMER

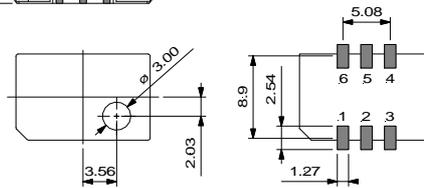
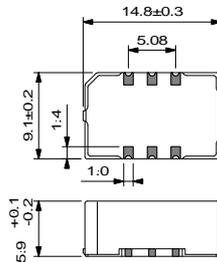
### DFA S1-KHAZ (5 V) & DFA S1-LHAZ (3.3 V)

#### KEY FEATURES

**5 to 52 MHz**  
**Tight stability**  
**Analogue temperature compensation**

#### APPLICATIONS

**SDH/Sonet/Microwave**



PC board footprint

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

TYPE	DFA S1-KHAZ	DFA S1-LHAZ
Frequency Range	5 to 52 MHz	

ELECTRICAL SPECIFICATIONS	DFA S1-KHAZ	DFA S1-LHAZ
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 2	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:			ageing	calibration @ 25°C
			temperature	Vcc ± 5 %	load ± 10 %		
all types	0 to 70°C	B0.5	≤ ± 0.5	≤ ± 0.1	≤ ± 0.1	≤ ± 1	By internal trimmer
	-20 to 70°C	C1	≤ ± 1.0				
	-40 to 85°C	E2	≤ ± 2.0				
remark			ageing is 1 <sup>st</sup> year at 25°C				
Internal trimmer			pulling ≥ ± 5 ppm				

ORDERING CODE	type + option code + frequency + model code
Example	DFA S1-LHAZ 19.44 MHz E2

NOTES	not all combinations of stabilities and frequencies are available
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