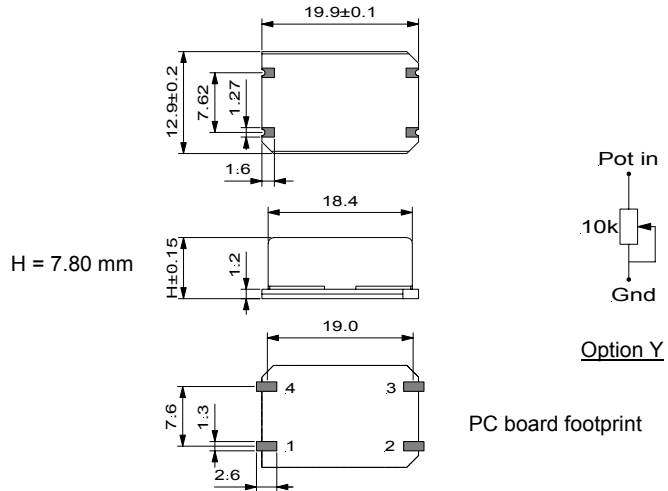


SURFACE MOUNT PRECISION TCXO

DFA S7-K (5 V) & DFA S7-L (3.3 V)

KEY FEATURES
<p>2 to 52 MHz</p> <p>Tight stability</p> <p>Analogue temperature compensation</p>
APPLICATIONS
SDH/Sonet/Microwave

Function	DFA S7
NC/Pot in/V _{co}	1
GND	2
Output	3
V _{cc}	4



TYPE	DFA S7-KH	DFA S7-KO	DFA S7-LH	DFA S7-LO
Frequency Range	2 to 52 MHz	2 to 52 MHz	2 to 45 MHz	2 to 45 MHz

ELECTRICAL SPECIFICATIONS					
supply voltage		5 V ± 5 %	5 V ± 5 %	3.2 V to 3.6 V	3.2 V to 3.6 V
supply current (no load)	≤ 25 MHz	≤ 10 mA	≤ 5 mA	≤ 5 mA	≤ 5 mA
	≤ 35 MHz	≤ 20 mA	≤ 20 mA	≤ 15 mA	≤ 15 mA
	> 35 MHz	≤ 30 mA	≤ 30 mA	≤ 20 mA	≤ 20 mA
output load		HCMOS 15 pF or 2 TTL	clipped sine 20kΩ/5 pF	HCMOS 15 pF or 1 TTL	clipped sine 20kΩ/5 pF
duty cycle @ 2.5V (LH @ 1.65 V)		≤ 45/55...55/45 %		≤ 45/55...55/45 %	
rise/fall times (10 to 90 %)		≤ 10 ns		≤ 10 ns	
high/low levels or output amplitude		≥ 3.5 V / ≤ 0.5 V	≥ 2 V p-p	≥ 2.7 V / ≤ 0.2 V	≥ 1.5 V p-p
start-up		≤ 10 ms @ 4.75V	≤ 10 ms @ 4.75V	≤ 10 ms @ 3.2V	≤ 10 ms @ 3.2V
remarks	duty cycle for frequencies > 30 MHz is 40/60%...60/40%				

FREQUENCY STABILITY			detailed tolerances [ppm]			
type	temperature range	model code	stability versus:			
			temperature	Vcc range	load ± 10 %	ageing
all types	-10 to 60°C	D1	≤ ± 1	≤ ± 0.1	≤ ± 0.1	≤ ± 1
	-20 to 70°C	C1	≤ ± 1			
	-30 to 75°C	C2	≤ ± 2			
DFA S7-K types	-40 to 85°C	E5	≤ ± 5	≤ ± 0.1	≤ ± 0.1	≤ ± 1
		E3	≤ ± 3			
		E2	≤ ± 2			
remarks			factory calibration if no trimming option ≤ ± 1 ppm			
			ageing is 1 st year at 25°C			
			DFA S7-L : Vcc range ≤ ± 0.3 ppm (f ≥ 30 MHz)			

OPTIONS	CODE	
external voltage control	V	DFA S7-K : 2.5 V ± 2 V ≥ ± 5 ppm, positive slope
internal trimmer	A	DFA S7-L : 1.5 V ± 1.5 V ≥ ± 5 ppm, positive slope
external potentiometer	Y	≥ ± 5 ppm
		10 kΩ ≥ ± 5 ppm, between pin 1 and GND (not available with internal trimmer)

ORDERING CODE	type + option code + frequency + model code
Example	DFA S7-KH 16.384 MHz E2