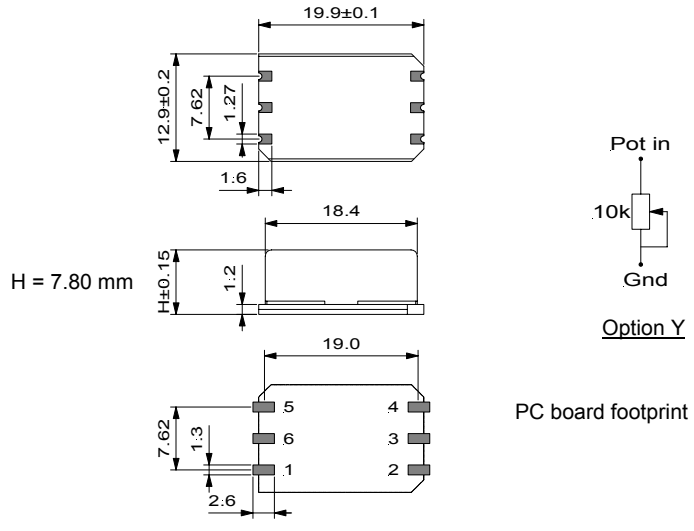


SURFACE MOUNT PRECISION TCXO

DFA S7-KHZ (5 V) & DFA S7-LHZ (3.3 V)

KEY FEATURES
2 to 52 MHz
Tri-state function
Analogue temperature compensation
APPLICATIONS
SDH/Sonet/Microwave



Function	DFA S7
NC / Pot in / Vco	1
GND	2
N / C	3
Output	4
Vcc	5
E / D	6

TYPE	DFA S7-KHZ	DFA S7-LHZ
Frequency Range	2 to 52 MHz	2 to 45 MHz

ELECTRICAL SPECIFICATIONS	DFA S7-KHZ	DFA S7-LHZ
supply voltage	5 V ± 5 %	3.3 V ± 5 %
supply current (no load)	≤ 25 MHz ≤ 20 mA ≤ 35 MHz ≤ 30 mA > 35 MHz ≤ 40 mA	≤ 10 mA ≤ 15 mA ≤ 20 mA
output load	HCMOS 15 pF or 2 TTL	HCMOS 15 pF or 1 TTL
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	≥ 2.7 V / ≤ 0.2 V
start-up	≤ 10 ms @ 4.75V	≤ 10 ms @ 3.15V
tri-state control on pin 6	high or open = enable, low = high Z	high or open = enable, low = high Z
remark	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 type	-40 to 85°C	E3	≤ ± 3	≤ ± 0.1	≤ ± 0.1	≤ ± 1
remarks			factory calibration if no trimming option ≤ ± 1 ppm ageing is 1 st year at 25°C			

OPTIONS	CODE	TOLERANCE
external voltage control	V	DFA S7-K : 2.5 V ± 2 V ≥ ± 5 ppm, positive slope DFA S7-L : 1.5 V ± 1.5 V ≥ ± 5 ppm, positive slope
internal trimmer	A	≥ ± 5 ppm
external potentiometer	Y	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-KHZ 16.384 MHz E3