

# HIGH PERFORMANCE SMD OCXO

## TYPE DFO S4-S

FEATURES	
10 MHz	
Standard package	
Very high stability	
APPLICATIONS	
Instrumentation, reference	

Function	DFO S4
Output	1
Oven alarm output	2
GND	3
V ref.	4
Voltage control	5
E/D	6
Vcc	7

TYPE	DFO S4-S
Frequency	10 MHz

ELECTRICAL SPECIFICATIONS	
supply voltage	12 V ± 5 %
supply current (no load) @ 25°C	≤ 100 mA
supply current during warm up	≤ 350 mA
output load	SINE WAVE, 50 Ω
output level	≥ +5 dBm, ≤ +10 dBm
harmonics	-20 dBc
SSB phase noise (1 Hz B.W.)	-145 dBc/Hz @ 100 Hz
	-150 dBc/Hz @ 1 kHz
	-150 dBc/Hz @ 10 kHz
	-150 dBc/Hz @ 100 kHz
Enable/disable (pin 6)	low = disable, high = enable
Oven alarm output (pin 2)	low = alarm, high = oven ready
V ref. (pin 4)	5 V
warm up time	≤ ± 10 ppb in 10 min @ 25°C

FREQUENCY STABILITY			detailed tolerances after 30 days of operation					
type	temperature range	model code	Temperature	Vcc ± 5 %	Load ± 5 %	Daily ageing	Yearly ageing	Calibration @ 25°C
all types	-10 to 60°C	D5	≤ ± 5 ppb	± 0.5 ppb typ.	≤ ± 0.5 ppb	≤ ± 0.5 ppb	≤ ± 30 ppb	≤ ± 50 ppb
Long term ageing			≤ ± 500 ppb over 15 years					
Short term stability (Allan variance)			5 × 10 <sup>-12</sup> for T = 1 sec., 1 × 10 <sup>-11</sup> for T = 10 sec.					

OPTIONS	CODE	
external voltage	V	0 V to Vref centered @ 2.5 V ≥ ± 1 ppm

ORDERING CODE	type + option code + frequency + model code + voltage
Example	DFO 25-S 10 MHz D5/12