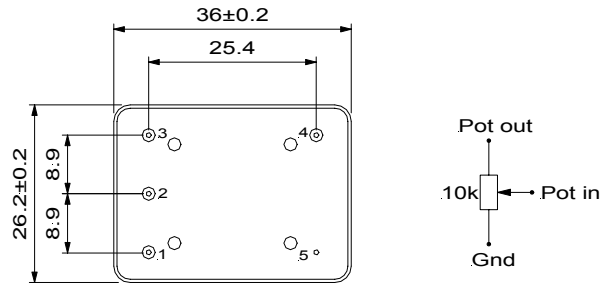


HIGH STABILITY MINIATURE OCXO TYPES DFO 236-M & DFO 236-MS

EXCELLENT SHORT TERM STABILITY

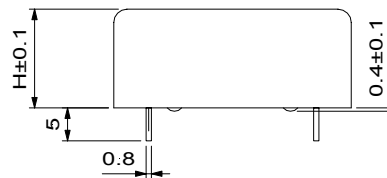
LOW POWER CONSUMPTION

FAST WARM UP



Function	DFO 236-M/MS
Pot in/V control	1
Pot out/NC	2
Vcc	3
Output	4
GND	5

H = 17.0 mm



TYPE	DFO 236-MS	DFO 236-MSS	DFO 236-MH	DFO 236-MSH
Frequency Range	4 to 50 MHz	4 to 50 MHz	4 to 50 MHz	4 to 20 MHz

ELECTRICAL SPECIFICATIONS		DFO 236-MS	DFO 236-MSS	DFO 236-MH	DFO 236-MSH
supply voltage		5 V ± 5 % to 15 V ± 10 %	5 V ± 5 % to 15 V ± 10 %	5 V ± 5 % to 15 V ± 10 %	
supply power (no load) @ 25°C		≤ 1 W	≤ 1 W	≤ 1 W	
supply power during warm up		≤ 5 W	≤ 5 W	≤ 5 W	
output load		Sine 50 Ω ± 10 %	Sine 50 Ω ± 10 %	HCMOS 15 pF or 2 TTL	
duty cycle @ 2.5 V				40/60...60/40 %	
rise & fall times (10 to 90%)				≤ 15 ns	
high/low levels or output amplitude		0 dBm ± 2 dB	0 dBm ± 2 dB	≥ 3.5 V ≤ 0.5 V	
SSB phase noise (1 Hz BW) @ 1 Hz		≤ -70 dBc/Hz	≤ -90 dBc/Hz		
(typical @ 10MHz) @ 10 Hz		≤ -100 dBc/Hz	≤ -120 dBc/Hz		
@ 100 Hz		≤ -120 dBc/Hz	≤ -130 dBc/Hz		
@ 1 kHz		≤ -130 dBc/Hz	≤ -135 dBc/Hz		
harmonics		≤ -20 dBc	≤ -25 dBc		
spurious		≤ -70 dBc	≤ -70 dBc		
warm up time to reach ≤ 1 x 10 ^{E-7}		≤ 10 min	≤ 10 min	≤ 10 min	

FREQUENCY STABILITY			detailed tolerances				
type	temperature range	model code	stability versus :			short term	10 kΩ pot. pulling range
			temperature	ageing/day	ageing/ 1 st year		
DFO 236-M	-20 to 70°C	C1717	≤ ± 1 x 10 ^{E-7}	≤ 1 x 10 ^{E-9}	≤ 1 x 10 ^{E-7}	≤ 1 x 10 ^{E-10}	≥ ± 1 x 10 ^{E-6}
		C5817	≤ ± 5 x 10 ^{E-8}				
DFO 236-MSH		C1817	≤ ± 1 x 10 ^{E-8}				
DFO 236-MSS						≤ 5 x 10 ^{E-11}	≥ ± 5 x 10 ^{E-7}
stability versus supply voltage			≤ 1 x 10 ^{E-9} for Vcc ± 10 % (5 V ± 5 %)				

OPTIONS	CODE	
external voltage	V	2.5 V ± 2 V ≥ ± 1 ppm, positive slope

ORDERING CODE	type + option code + frequency + model code + voltage value
Example	DFO 236-MHV 13.000 MHz C1717/12