

Series OA265-10

- (10 ~ 100)MHz
- stability from ± 0.1 ppm
- 14 pin DIL resistance weld case
- fast warm up time
- ageing from ± 4.6 ppm over 10 years

Applications:

- telecomms systems
- instrumentation
- portable equipment



Standard options:

frequency range:	_____ (10 ~ 100)MHz _____		
accuracy codes:	_____ (A) _____ (B) _____		
temperature tolerance	± 0.1 ppm	± 0.25 ppm	
temperature range	(-10 +60) $^{\circ}$ C	(-20 +70) $^{\circ}$ C	
output codes:	_____ (C) _____ (L) _____		
output	clipped sine wave, 1Vp/p, 1K//10pf harmonics -30dBc max.	CMOS 15pF, 45% ~ 55% <2ns max. rise and fall	
supply voltage codes:	_____ (V1) _____ (V2) _____ (V3) _____		
supply voltage	+3.3Vd.c.	+5.0Vd.c.	+12.0Vd.c.

Generic specification:

stability:			
against supply voltage change		± 0.02 ppm max. for $V_{cc} \pm 5\%$	
against load change		± 0.02 ppm max. for load $\pm 10\%$	
ageing short term		± 0.005 ppm max. per day	
ageing long term		after 30 days continuous operation	
voltage trim V_t		± 1.5 ppm max. first year	
trim input impedance		± 10 ppm min. typical, linearity $\pm 5\%$	
		100K Ω min.	
power supplies:			
supply voltage V_{cc}	+3.3Vd.c.	+5.0Vd.c.	+12.0Vd.c.
start up current at min. temp. range	900mA max.	600mA max.	300mA max.
quiescent current at max. temp. range	320mA max.	220mA max.	120mA max.
warm up time	5 minutes max. to within 0.1ppm of nominal		
insulation resistance	500Meg Ω min., 100Vd.c.		
phase noise:			
single sideband, 1Hz bandwidth		-80dBc/Hz, $f_o + 10$ Hz	
		-100dBc/Hz, $f_o + 100$ Hz	
		-125dBc/Hz, $f_o + 1$ kHz	
temperature:			
operating range	(-10 +60) $^{\circ}$ C	(-20 +70) $^{\circ}$ C	
storage range	(-40 +125) $^{\circ}$ C	(-40 +125) $^{\circ}$ C	

Environmental conditions:

mechanical shock: MIL standard 202F, method 213, condition J

thermal shock: MIL standard 202F, method 107, condition A

vibration: MIL standard 202F, method 204, condition B

solderability: 5 seconds max. at +230°C, 3 seconds max. at +350°C

Marking:

frequency, date code, serial number on high temperature metalised polyester label

Ordering code:

standard options:

OA265-10 A C V2 - 10.00M

OA265-10 = series generic code

A temp. tol. and temp. range code: A = $\pm 0.1\text{ppm}(-10 +60)^\circ\text{C}$

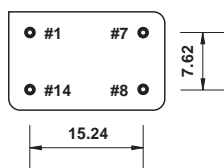
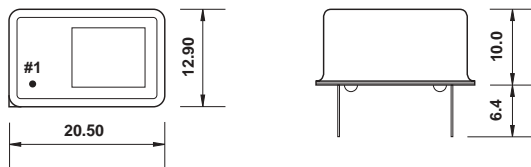
C output code: C = clipped sine wave, 1Vp/p, 1K//10pf

V2 supply voltage code: V2 = +5Vd.c. supply

10.00M output frequency: 10.00M = 10.000MHz

custom specification: part number issued with custom specification and drawing

Dimensions(mm):

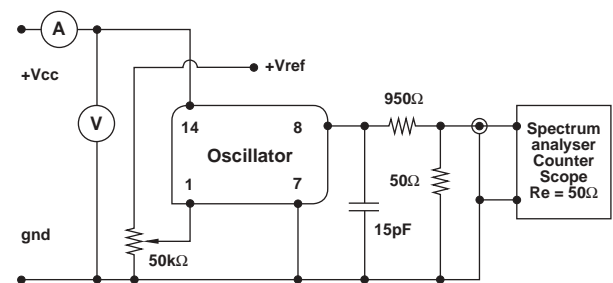


Pins viewed from bottom
pin diameter 0.45mm

Pin connections:

- #1 trim
- #7 ground/case
- #8 output
- #14 +V_{CC}

Test circuit, CMOS load:



test circuit includes a 20:1 step down into a matched 50Ω load